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Vol. CX.

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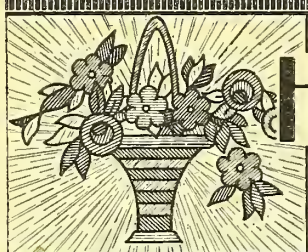
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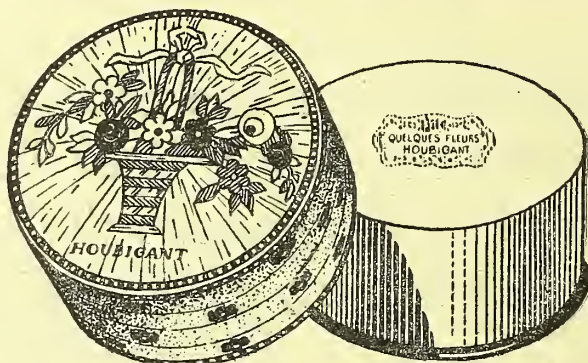
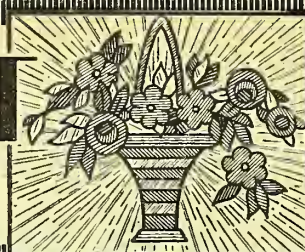
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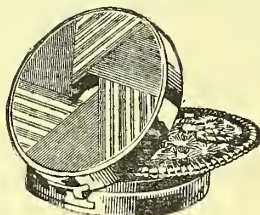
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## INDEX TO ADVERTISERS

Addis, R., & Son (Dental Plate Brush) 22	Brooks, J., & Co., Ltd. (Spray Solutions) xiv	George, Ernest J. (Valuer, &c.) Col. Supp.
Alcock Manfg. Co. (Plasters) xxxvii	Brown & Son (Stills) 38	Gilmont Products, Ltd. (New Mix Tooth Paste) 9
Allen & Hanburys, Ltd. (Cod Liver Oil and Malt) Cover	Burge, Warren & Ridgley, Ltd. (Surgical Rubber Goods) xxxviii	Glass Products, Ltd. (Bottles, &c.) xl
Allen, Stafford, & Sons, Ltd. (Oil of Almonds) 4	Burgeyne, Burdidge & Co., Ltd. (Sulphur Tablets) 29	Gollin & Co. Pty., Ltd. ("Aspro") xvii
Allwood Bros. (Carnation Perfumery) 26	Burkett, Sharp & Co., Ltd. (Chemicals) iv	Goodall, Backhouse & Co. (Seidlitz Powders, &c.) xv
American Hard Rubber Co. (Britain), Ltd. (Ace Combs) 27	Burrough, J., Ltd. (Alcohol) Leader Page	Gough, Kidston & Co. (Petroleum Jelly, &c.) xxxii
Anglo-American Oil Co., Ltd. (Nujol) xvi	Burroughs Wellcome & Co. (Photographic Chemicals) 51	Gower, John (Books) Col. Supp.
Anglo-French Drug Co., Ltd. (Pharmaceutical Preps.) xviii	Carnegie Bros. (Chemicals) ix	Groat & Co., Ltd. (Crêpe Bandages) xxxvii
Arnfield, J. C., & Sons, Ltd. (Raspberry Vinegar) x	Carr & Co., Ltd. (Bath Ruskis) xxxviii	Guest, H. Marcel (Capping Solution) 49
Assoc. of Manfg. Chts., Ltd. Col. Supp.	Castle Huskisson, Ltd. (Tablets, &c.) xii	Guest, T., & Co., Ltd. (Tablets, &c.) 14
Ayrton-Graham, Ltd. (Shopfittings) xxxviii	Cataline Co. (Veterinary Medicines) 41	Hackett, S. E. (Film Overstocks) Col. Supp.
Ayrton, Saunders & Co., Ltd. (Wholesale Druggists) 15	Christy, T., & Co. (Pyshan Points Tea, Barker Lotion, Grips Pastilles) 48-52-xxiv	Hall, Forster & Co., Ltd. (Vapourisers) xxxviii
Bandong Quinine Factories 36	Cocoa Mills, Wessanen 3	Haller Labs., Ltd. (Danyez Virus) 40
Bath and West of England College 36	Cussons, Sons & Co., Ltd. (Toilet Specialities) 3	Haller & Phillips, Ltd. (Glycerine) x
Bayer Products, Ltd. (Chemicals) viii	Davenport, J. T., Ltd. (Chlorodyne) xx	Hampshire, F. W., & Co., Ltd. (Snowfire Cream) xx
Beatson, Clark & Co., Ltd. (Bottles) xl	Dearborn (1923), Ltd. (Toilet Preps.) 24	Harper, C. W. (Honey) xxxviii
Beattie, Hunter (Shaving Soap, &c.) 33	Debacq & Harrop (Toilet Preps.) 24	Harris, J., & Co. (Surgical Rubber Goods) xxxviii
Beechams Pills, Ltd. (Beechams Pills, &c.) xvi-xxvii	Dee Oil Co., Ltd. (Petroleum Jelly) xlii	Harrison, A., & Sons (Printing) 49
Bell, John, Hills & Lucas, Ltd. (Pharm. Preps.) 48	Deshell Labs., Ltd. (Petrolagar) xiv	Harvey & Co. (Dublin), Ltd. (Vetn.) 40
Benckiser, J. A. (Tartaric Acid, &c.) vi	Dick, W. B., & Co., Ltd. (Liquid Paraffin) xxxii	Haywood, J. H., Ltd. (Surgical Appliances) xxxvi
Benger's Food, Ltd. (Foods) 52	Dickeson, R., & Co. (Besorbon) xviii	Heggie & Aitchison (Shopfittings) 46
Bengué & Co., Ltd. (Bengué's Balsam) xvi	Drug & Chemical Corporation, Ltd. (Influcine) xxv	Henry, T. & W. (Calcined Magnesia) xviii
Bennett, Sons & Shears, Ltd. (Machinery) 39	Dubarry et Cie (Silkashave) Cover	Heppels, Ltd. (Urodonal) 18
Berdoo & Fish (Valuers, &c.) Col. Supp.	Dudley & Co., Ltd. (Cash Tills, &c.) 42-48	Heward, R. H., Co. (Surgical) xxxviii
Berg, E., Ltd. (Shopfittings) Col. Supp.	Edme, Ltd. (Malt Extract, &c.) xxx	Hind & Lund, Ltd. (Machinery) 39
Berk, F. W., & Co., Ltd. (Chemicals) ii	Edwards Harlene, Ltd. (Hair Preps.) 28	Hindes, Ltd. (Hair Brushes) 34
Betts & Co., Ltd. (Collapsible Tubes) 42	Edwards, Wm., & Sons (Pasta Mack) 48	Hoffmann-La Roche Chemical Works, Ltd. (Pharmaceutical Products) viii
Bishop, Alfred, Ltd. (Litomyrine) 32	Eno, J. C., Ltd. (Fruit Salt) 31	Holl, Karl (Screw Caps, &c.) 41
Blackwell, Hayes & Co., Ltd. (Fruit Essences, &c.) viii	Evans, Adlard & Co., Ltd. (Filter Papers) 42	Honeywill Bros., Ltd. (Alcohol) xxxiii
Borax Consolidated, Ltd. (Borax) ix	Fairchild Bros. & Foster (Panopepton) Leader Page	Houbigan Perfumery 2
Box, W. H. (Box's Pills) xx	Fairy Dyes, Ltd. (Home Dyes) 14	Howard, Lloyd & Co., Ltd. (Tablets) xii
Braun, H. W. (Chemical Products) vii	Fellows Medical Manfg. Co., Inc. (Fellows Syrup) xxii	Hubbuck, T., & Son, Ltd. (Oxide of Zinc) x
Bredt, W. (Dr. Thilo's Preps.) vi	Ferris & Co., Ltd. (Nepenthe) xxii	Hunt's, Ltd. (Stone Bottles and Jars) Leader Page
British Automatic Vendors, Ltd. 16	Fink, F., & Co. (Gums) 48	Iglodine Co., Ltd. (Iglodine) xxii
British Diamalt Co. (Extract of Malt) xxxviii	Ford, Shapland & Co., Ltd. (Toilet Paper) xxxvi	Ioco Rubber & Waterproofing Co., Ltd. (Rubber Sponges) 34
British Drug Houses, Ltd. (Ether Puriss B.D.H.) 43	Frankenberg, L. (Razor Blades) 34	Irving's Yeast Vite, Ltd. xxxvi
British Kork-N-Seal Agency, Ltd. xli	Franklin, J. G., & Son, Ltd. (Soothers, &c.) xxxvii	Jackel et Cie (of Paris), Ltd. (Hair Cream) 22
British Thomson-Houston Co., Ltd. (Mazda Lamps) 27	Freeman's Chlorodyne, Ltd. xxii	Jackson, Ernest, & Co., Ltd. (Glossettes) xii
British Xylonite Co., Ltd. (Halex Toothbrushes) 26	Frendenthell, Smith & Co. (C.L.O.) xxx	Jackson, J. P., & Co., Ltd. (Rapid Filters) 38
Brook, Parker & Co., Ltd. (Dutch Drops) 48	Gardner, W., & Sons (Glos.), Ltd. (Machinery) 38	

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## INDEX—cont.

Johnson & Sons Mfg. Chemists, Ltd. (Galenicals, &c.)	iii	Niltim Lab. (Marienbad Water)	xxx	Smith, Martin H., Co. (Ergoapiol)	xxii
Josephs, Percy R. E. (Shopfittings)	Col. Supp.	Norwegian Cod Liver Oil	xxix	Smith, T. & H., Ltd. (Chemicals)	iv
Josephs, Philip, & Sons (Shopfittings)	44-Col. Supp.	Ondura Tyre Works (Re-treading)	41	Soc. Voor Chemische Industrie (Theobromine, &c.)	vi
Kerfoot, T., & Co., Ltd. (Vapex Inhalant)	17	Oppenheimer, Son & Co., Ltd. (Roboleine)	19	Speedy D. & P. (Service ("Fotozo"))	48
King, G., & Co., Ltd. (Foods)	37	Orridge & Co. (Valuers, &c.)	Col. Supp.	Spencer Bros. (Puffs)	27
King, J. C., Ltd. (Showcases)	46	Parke, Davis & Co. (Hydrogen Peroxide)	xxi	Spicer, E. H., & Co., Ltd. (Solvochin)	xiv
Lambert, L., & Co., Ltd. (Caramel)	Leader Page	Parkinsons, Ltd. (Kilko)	Leader Page	Squire & Sons, Ltd. (Books, &c.)	36
Lax & Shaw, Ltd. (Bottles)	xlii	Peck Bros. & Winch, Ltd. (Matte Tea)	45	Standard Yeast Co., Ltd. ("Lycos")	xxxix
Lee, R. (Manicure Requisites)	22	Penny & Co., Ltd. (Change of Address)	35	Sterns, Ltd. (Oils, Petroleum, &c.)	xxxv
Leigh, R. & H., & Sons, Ltd. (Carboy Stand)	39	Perfumeria Gal. (London), Ltd.		Sturge, J. & E., Ltd. (Precip Chalk)	xi
Liebermann, L. L. (Optical Tuition)	48	(Toilet Soap, &c.)	20-21	Surgical Hosiery Co., Ltd.	xxxix
Lincoln & Midland Counties Drug Co., Ltd. (Clarke's Blood Mixture)	xxvi	Perken, Son, & Co., Ltd. (Clinical Thermometers)	xxxvii	Suttley & Silverlock, Ltd. (Printers)	xlv
Liverpool School of Pharmacy	36	Peronia Co., Ltd. ("Idenit")	xxxix	Tatcho Tote Co. (Hair Preps.)	48
Lofthouse & Saltmer, Ltd. (Ballroom Floor Polish)	xliv	Perry & Hope, Ltd. (Phosphate of Soda)	43	Taylor, F. H., & Sons, Ltd. (Measures)	xlii
London College of Pharmacy	36	Perry's Powders, Ltd.	xvi	Teasdale Chlorodyne Co.	45
Lorimer-Marshall, Ltd. (Honey and Lemon Elixir)	35	Pharmaceutical Lanoline Co.	xxxii	Templeton, J., & Co. (Klen-Grez)	38
Magnus, Mabce & Reynard Inc. (Ess. Oils)	22	Phosferine (Ashton & Parsons), Ltd.	xiv	Tennants (Lanes), Ltd. (Chemicals)	iv
Marie Antoinette Co. (Morgan's Pomade)	26	Photopress (Developing, &c.)	37	Thermogene Co., Ltd. (Medicated Wadding)	1
Marsden, C. C. (Valuer, &c.) Col. Supp.	41	Pierson, Morrell & Co., Ltd. (Aspirin)	xii	Tilbury, W. R., & Son (Tooth Brushes)	27
Martin, Bob, Ltd. (Dog Medicines)	41	Pindar, J. W., & Co. (Mchyl.)	38	Tipper, B. C., & Son, Ltd. (Veterinary)	40
Mathews, D., & Sons (Shopfittings)	40	Poth, Hille & Co. (Ceresine Wax)	xxxiv	Tolkien, C. & Co., Ltd. (Molvita)	6
Matthews Laboratories, Ltd. (Dietaries)	Leader Page	Potter & Clarke, Ltd. (Wholesale Druggists)	47	Tomlinson, T., & Son (Valuer) Col. Supp.	
Maw, S., Son & Sons, Ltd.	11	Poulton, H. J. (Glassware)	41	Townsend, James, & Sons (Printing)	xlv
May, Roberts & Co., Ltd. (Catalogue)	xvii	Prescriber, The	48	Treble & Co. (Shopfittings)	38
Meade-King, Robinson & Co., Ltd. (Petroleum Jelly, &c.)	xxxiv	Proprietary Agencies, Ltd. (Milk of Magnesia)	52	Tyrer, T., & Co., Ltd. (Chemicals)	iii
Midgley & Parkinson, Ltd. (Yeast Preps.)	48	Pure Russian Liquid Paraffin Co., Ltd.	xxxv	United Chemists' Association, Ltd. (Throat Lozenges)	xxiii
Millar, A., & Co., Ltd. (Orange Wine)	xxviii	Reed, A. E., & Co. (Glycerine)	ii	United Drug Co., Ltd.	15
Mond Staffordshire Refining Co., Ltd. (Monsol Prods.)	xix	Riley, J., & Sons, Ltd. (Hypo)	iii	Vernon & Co., Ltd. (Surg. Dressings)	7
Morny Frères, Ltd. (Toilet Preps.)	Cover	Rippin, A. J., Ltd. (Drugs)	ii	Vinolia Co., Ltd. (Baby Soap)	25
Muir, W. S., & Co., Ltd. (Transparent Paper)	50	Rivista Italiana delle Essenze e Profumi	xliii	Wagner, R. V. (Bottle Caps)	xi
Napp, H. R., Ltd. ("Merck" Chemicals)	vii	Roberts' Patent Filling Machine Co.	46	Warne, W., & Co., Ltd. (Surg. Goods)	xxxvi
National Association of Opticians	37	Robinson & Sons, Ltd. (Boxes)	44-xliii	Warrington Chemical & Drug Co., Ltd.	iv
National Union of Drug & Chemical Workers	Col. Supp.	Roebuck's Advertising Service (Wanie Blades)	34	Washington Chemical Co., Ltd. (Pat-tinson's Magnesia)	v
Natural Products, Ltd. (Novopine)	xiii	Rowland, A., & Sons, Ltd. (Macassar Oil)	26	Webster, T., & Co., Ltd. (Stoppers)	xxx
Naylor, Chas. E. (Valuer, &c.) Col. Supp.	5	Rudduck & Co. (Shopfittings) Col. Supp.		Westminster College of Pharmacy	36
New Fra Treatment Co. ("Elasto")	5	Saint Raphael Cie (Tonic Wine)	xxxi	Wheeler & Huisking, Ltd. (Botanical Drugs, &c.)	xi
Newbery, F., & Sons, Ltd. (Waterglass)	41	Saville Perfumery, Ltd. (Perfumery)	25	Whitaker & Co. (Hat Dyes, Household Dyes)	12
		Schering, Ltd. (Pharmaceutical Specialities)	Leader Page	White, A., & Sons, Ltd. (Chemicals)	ii
		Scruton, O., & Co. (Nurse Harvey's Mixture)	37	Wiglesworth, Ltd. (Sulphur Tablets)	1
		Scurr, C. A. (Optical Tuition)	37	Wilkinson, S. W., & Co. (Tablet Machines)	39
		Shadeine Co. (Hair Dyes)	48	Willows, Francis, Butler & Thompson, Ltd. (Infusions, &c.)	xviii
		Sharland & Co. (Publications)	48	Winchester Manig. Co., Ltd. ("Wimaco" Surgical Goods)	xxxvi
		Shawyer, A. J., & Co. (Developing)	37	Woolley, Jas., Sons & Co., Ltd. (Ballroom Floor Polish)	10
		Sherley, A. F., & Co., Ltd. (Dog and Cat Medicines)	40	Wright, Layman & Umney, Ltd. (Coal Tar Soap)	Cover
		Sim, Ltd. (Ampoule Fills)	vi	Yadil Products (1925), Ltd.	xxiv
		Sitora Refining Co., Ltd. (Liquid Paraffin, &c.)	xxxiv	Zeal, G. H., Ltd. (Clinicals)	xxxix

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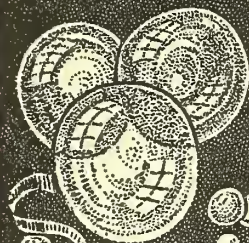
**Nature's  
Dentifrice**

**No Soap  
No Grit  
No Drugs**



For a **PERFECT** dance floor  
you can confidently recommend -

# BOVAL FLOOR GLOSS



No Wax  
No Worry  
Delightfully  
fragrant  
Creates No  
Dust

FOR  
BALL-ROOM  
FLOORS



Simply  
Sprinkle  
on the floor  
- the dancers  
do the rest.

Take full advantage  
of the  
**DANCING SEASON**  
by displaying  
'BOVAL'  
**FLOOR GLOSS**

*Packed in beautifully decorated sprinkler-top containers.*

1/6 P.A.T.A. - 12/- doz.

2/6 „ - 20/- doz.

**Bonus for 10 Days' Window Display**  
13 to the dozen on orders  
to the net value of £5.

Carriage Paid. Free Package.

*Attractive Showcard Supplied.*

STOCKED BY LONDON HOUSES.

**JAMES WOOLLEY  
SONS & Co., LTD.  
MANCHESTER.**





# Maw's Page

## You, your Customer and 'Parex' hot-water bottles

Just now a display of 'Parex' hot-water bottles in their attractive envelopes, surrounding the popular Lucie Attwell showcard, is certain to create a good deal of interest and to make many sales.

And every 'Parex' hot-water bottle sale gives satisfaction to the pharmacist and to his customer.

It gives satisfaction to the customer because the 'Parex' hot-water bottle has many definite advantages: the washer less and captive stopper, reinforced seams, etc. Because, also, it is definitely guaranteed.

It yields the pharmacist a substantial profit and helps to consolidate his hot-water bottle business, because 'Parex' quality produces repeat orders and 'Parex' bottles are sold only to pharmacists.

*It pays to display and to  
sell 'Parex' hot-water bottles.*

S. Maw, Son & Sons, Ltd.,  
Aldersgate St., London,  
and Barnet.





# LUTON STRAW HAT DYES

Are you  
handling  
this "Line"  
throughout the  
Winter months?

Every season sees an increasing call for the beautiful "Luton" colours for all manner of domestic and artistic purposes. Being *Waterproof* and easily applied with a brush these Dyes can be successfully used for renovating household articles and for many artistic hobbies.

PRICE, LARGE BOTTLES - 12/- per Dozen.  
Retail, P.A.T.A. - - - - 1/4 per Bottle.

## FOR EXPORT

In addition to the Well-known Series for the Home Trade, a Special Non-Inflammable Series for Export is made in "Luton" straw Hat Dyes for the Colonial and Foreign Trade. Send for Special Export Terms and Prices.

## AURORAL COLD WATER DYES FOR DANCE FROCKS AND LINGERIE

PRICES - 4/- per Dozen Packets. Retail, P.A.T.A., 6d. per Packet.

Write to-day for particulars concerning Discounts, also latest Patterns, etc.

**WHITAKER & CO., Dye Specialists for Chemists, KENDAL**

Telegrams: "Dullette, Kendal."

Established 1878.

Telephone: 214.

London Office and Showrooms: 179/185 GREAT PORTLAND STREET, W.1



There are now nearly  
**2000**  
**Rexall**  
**AGENCIES**  
*in Great Britain and Ireland*

**and 8,000 more spread over  
Canada, South Africa, the United  
States, and other parts of the  
English-speaking world.**

Rexall Chemists have the exclusive sales agency for Rexall Orderlies; Rexall Cherry Bark Cough Remedy; Rexall Bronchial Lozenges; Rexall Throat Pastilles; Puretest Aspirin Tablets; Puretest Iodised Throat Tablets; Puretest Liquid Paraffin, and many other preparations in increasing demand. Jonteel Toilet Preparations and First Aid Plasters and Dressings are also increasing rapidly in sales, through the medium of Rexall Pharmacies.

After 26 years of trading, the fundamental principles of this great co-partnership of retail chemists remain in force unchanged and unaltered.

*For further information, apply—*

**UNITED DRUG COMPANY, LTD.,  
NOTTINGHAM.**

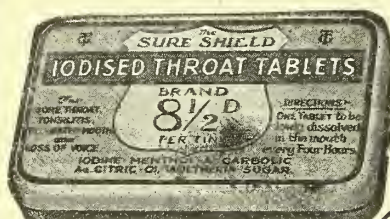
LONDON DEPOT:  
1 SWAN STREET,  
MINORIES, E.1

Telephone: ROYAL 8111.

THE SURE SHIELD



# IODISED THROAT TABLETS



8 1/2 d. Tins

5/6 per doz. 63/- per gross

1s. 3d. Tins

9/6 per doz.

108/- per gross

THOS. GUEST & CO., LTD., CARRUTHERS STREET,  
ANCOATS, MANCHESTER.



## FAIRY DYES

Mean Greater Turnover for You—and Absolute Satisfaction for Your Customers.

THERE is no more attractive line on the market to-day—there is no better seller—and no article has made larger strides in popular favour.

## FAIRY DYES

are now sold in glass tubes, encased in smart, clean-looking "safety-first" cartons. They are retailed at 2d. each, made in 25 popular shades and colours, and are extensively advertised in the right publications.

You can rely upon Fairy Dyes—for prompt delivery in any quantities—for fresh stocks—for quick, easy-to-handle, clean turnover, and as tried favourites your customers are always satisfied. See that you are supplied without delay.

For Trade Terms and particulars write to

**FAIRY DYES, LTD.** 61 WELL ROAD,  
GLASGOW.

London Depot - - - - 292 UPPER STREET, ISLINGTON, N.1.

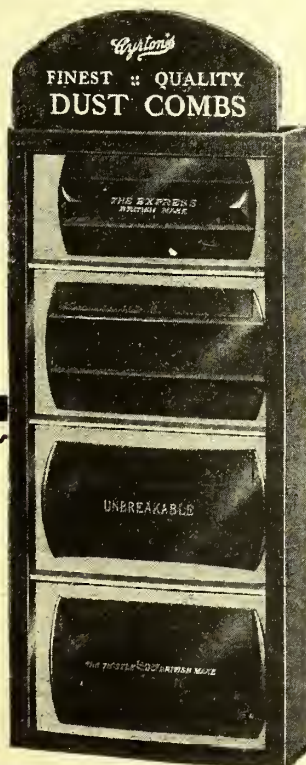


# They stand They hang THEY SELL

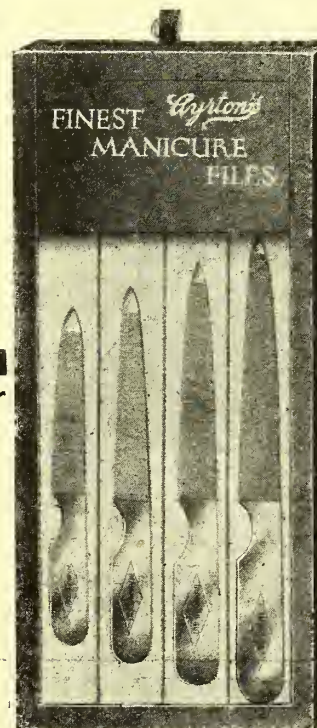
Don't you sometimes wish that you could display general articles with the same force that some proprietaries have behind them? We give you no less than 5 chances here.

¶ Each case is dust-proof, easily accessible and yet pilfer proof.

- 1 DUST COMBS, WHITE.** This case stands on any 6 inches of counter space, ready to sell either of 4 sizes, best quality dust combs. It contains 2 dozen assorted, from 3/6 to 4/6 per dozen. .. per case 7/6
- 2 DUST COMBS, BLACK.** 2 dozen assorted sizes British made Dust Combs, ranging from 3/- to 7/- per dozen .. .. . per case 10/6
- 3 BAG COMBS.** An all-round assortment of English made Bag Combs in dressing, rake, or combined patterns. Three dozen complete in case .. .. . per case 18/-
- 4 MANICURE FILES.** 2 dozen English double-sided Manicures in 4 sizes. A most ready sale when displayed in this manner .. .. . Double Cut per case 7/-  
Triple " " " 9/-
- 5 SPONGE BAGS.** A fine display Cabinet, showing three kinds of Bags, and having a gold blocked canopy. Illustration by post if desired. Contains 2 dozen first quality all-round assortment of sizes, 2, 3 and 4. British make .. .. . per case 18/-



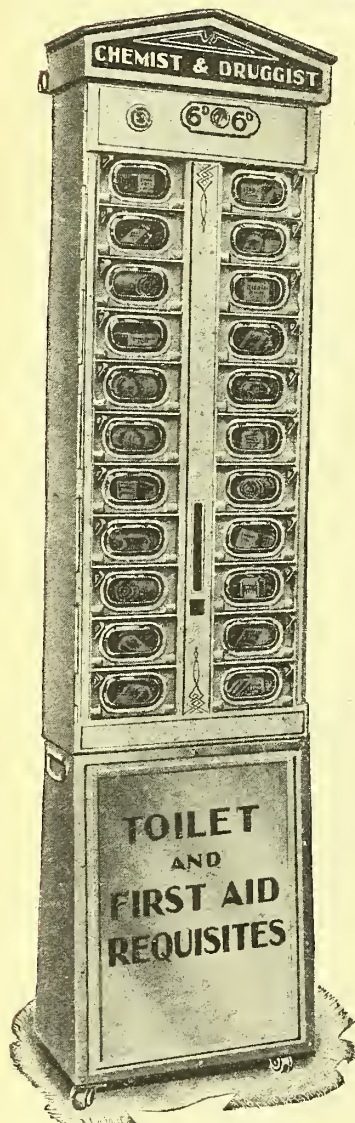
One each of these cases post free for  
**£3:3:0**  
would be a good investment.



**Ayrton,  
Saunders  
& Co. Ltd.  
LIVERPOOL**



# Don't buy Mushrooms!



*This is the B.A.V. Universal Vending Machine. Supplied in 22, 44, 66 or 88 Compartment Sizes.*

**A**UTOMATIC Vending Machines and Companies are springing up, like mushrooms—almost every night—all over the place. The wise buyer will remember that with such machines as with all other mechanical products apprentices cannot be expected to produce perfect products.

## It's experience that counts!

B.A.V. machines have 28 years of solid experience behind them. The most excellent time proved devices protected by British Patents are incorporated in our machines. Built in the largest and best equipped works in Great Britain—staffed by expert engineers and mechanics with over and above all a technical staff practised for

more than quarter of a century in producing mechanisms to protect your takings.

## The Proof

It is easy for new arrivals to make big claims but we invite you *in your own interests* to test our mechanisms against the best you can find elsewhere. Send a P.C.—send it now—or better still call at our showrooms and test our machines on the spot.

**Remember :—** We are the Sole Proprietors of the latest British Wistoft Patent Nos. 272354, 282586, 286923, 288448, 292319, 294032, 294807, 295309, 296750 (other Patents Pending), which combine to form the finest of all protective mechanism.

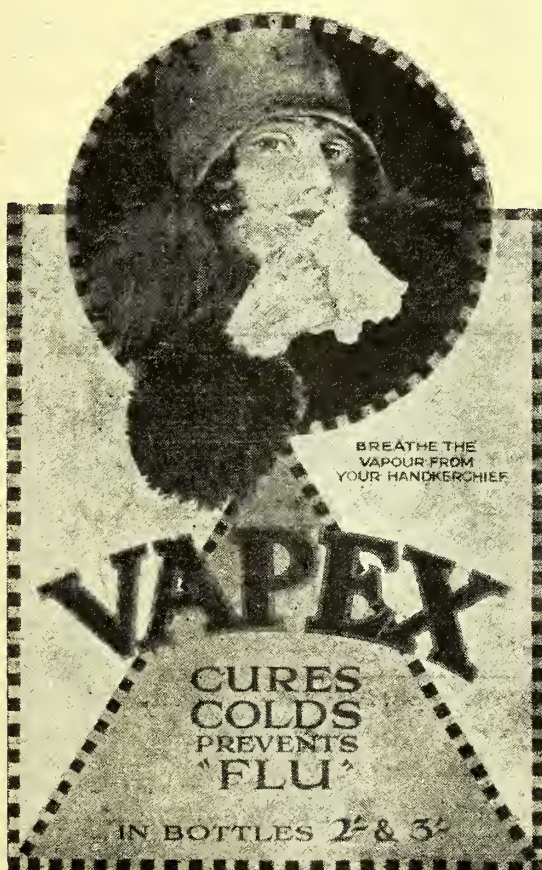
*We are prepared to quote for Automatic Vending Machines in quantities to deliver any type of suitable Product.*

*All orders dealt with in strict rotation.*

**BRITISH AUTOMATIC VENDORS, LTD.**  
60 HOLBORN VIADUCT . . . LONDON, E.C.1



*This card will look well  
on your counter*



"VAPEX" always pays well for a place on the counter and this new card will make an effective little display easy to arrange. Just one or two outers, a few cartons, if you like, and the show-card—that is all.

Clean and bright, quickly set out, easily dusted, occupying little room, telling the story at a glance, linking up the pharmacy with a comprehensive scheme of press advertising—these are some of the reasons why a "Vapex" display is so much appreciated on both sides of the counter.

The new card measures 10" x 6" and is printed in eight colours. Please mention No. 2.5 on your order, or a copy will be sent post free on request.

To EXPORT BUYERS—Orders and enquiries should be addressed to our Export Agents, Wm. Alfred Jones Ltd., West India House, Liverpool. Visitors to the British Industries Fair in London are invited to inspect Stand K119 where a wide range of Kerfoot specialities is to be seen.

THOMAS KERFOOT & CO. LTD.  
BARDSLEY VALE, LANCASHIRE,  
& Bardsley House, London, N.1  
ESTABLISHED 1797.

C/976

COPYRIGHT

# URODONAL

THE NEW 3/- SIZE  
IS BEING LARGELY ADVERTISED

---

This size will be a popular size for the public  
who wish to try this world-wide remedy.

---

## URODONAL

now sells at 3/-, 5/- & 12/-

---

*This will be a fine seller, so order at once and  
obtain it on the best terms from the sole agents :*

### HEPPELS, LIMITED

Wholesale Chemists

16 Grosvenor Place, LONDON, S.W.1,

and from all leading Wholesale Chemists.



# £6 of ROBOLEINE for £5

Any chemist who undertakes to make a fortnight's window display of Roboleine and places an order for £5 net value (made up in any sizes) will receive an additional £1 worth free, together with a supply of samples, literature and display matter. The consignment will be sent carriage paid, in a free case.

Roboleine has no opposition to overcome. It has been on the market 22 years and has an established position with Doctors and with the public. And this winter it is being advertised as never before, in all the great national dailies, in the leading provincial newspapers and in a long list of Women's papers. 127,684,000 large advertisements will appear between the beginning of October and the end of April.

Roboleine is going to be a best-seller this winter. Now is the time to make sure and get a good share of the increased trade.

## Roboleine

CONCENTRATED NOURISHMENT  
IN EVERY SPOONFUL

\*\*\*







By Appointment  
the King andto their Majesties  
Queen of Spain

# YOU MAKE A PROFIT OF

# 4<sup>1D</sup>/<sub>2</sub>

# ON EVERY TABLET of GAL

(Single Tablet Sales)

## TRADE TERMS

GAL TOILET SOAP retails at 1/- per tablet, and 2/9 per box of three. The price to you is 11/- per dozen tablets, less 33 1/3% discount. These prices are protected by the P.A.T.A.


- 3 boxes of Gal cost you 5/6.
- In single tablet sales they yield a profit of 3/6.
- A dozen single tablets cost you 7/4 and show a profit of 4/8.
- When sold in boxes you make a profit of 11d. per box.

ORDER THROUGH YOUR USUAL WHOLESALER & ASK FOR DISPLAY MATERIAL  
PERFUMERIA GAL (London) LTD., 76, STRAND, W.C.2



# TOILET GAL SOAP





# MOHAWK BRAND OIL PEPPERMINT

**IT IS OUR AIM** to keep MOHAWK BRAND in its present eminence as the highest standard of Peppermint Oil. Unsurpassed purity and delicacy of flavour.

Single or Redistilled qualities in 28-lb. tins or 20-lb. tins. Smaller packages if desired.

*For samples and quotations, spot or forward, please apply to sole agents for Great Britain and Ireland:*

**The Old Strand Chemical and Drug Co.**  
LIMITED  
41 Great Tower St. (22 Beer Lane), London, E.C.3  
Telephone : Royal 6737 (2 lines).

## MAGNUS MABEE & REYNARD INC. NEW YORK U.S.A.



THE ORIGINAL  
::: AND :::  
STILL THE BEST

## JACKEL'S CREAM FOR THE HAIR

SOLD EVERYWHERE.

**1/6 PER BOTTLE 2/6**

Jackel's Cream has now been over 40 years on the market and enjoys a steady reliable sale. Once a customer buys Jackel's, imitations have no appeal because Jackel's is still the best.

**11/6 and 18/- per dozen.  
Retailing at 1/6 & 2/6 per bot.**

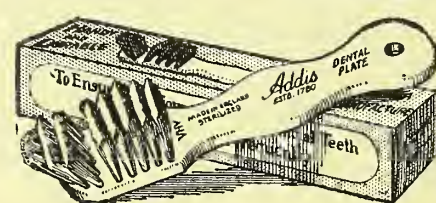
**BIG PROFITS ON THE NEW SHAMPOO.**

SHOWCARDS AND PARTICULARS FROM  
YOUR WHOLESALE HOUSE.

**JACKEL et CIE (of Paris) Ld.**  
GLASGOW.

*Addis*  
ESTD 1780

## WINGED DENTAL PLATE



**BRUSH WORKS, HERTFORD  
ENGLAND.**

**Robert Lee** 14 CALVERLEY GROVE,  
UPPER HOLLOWAY,  
LONDON, N.19

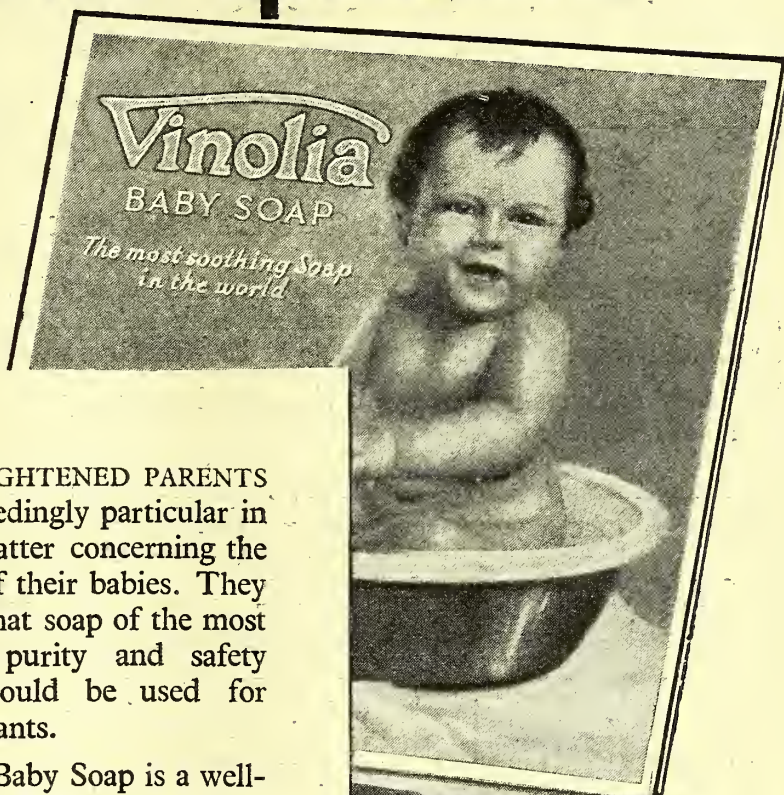
**Specialist in**  
the manufacture of  
**Orange Sticks  
& Emery Boards**  
BOXED, CARDED OR IN BULK  
**AT COMPETITIVE PRICES**



WHOLESALE ONLY.  
**BUY BRITISH.** Phone : Mountview 7811.



# Enlightened customers are good spenders



ENLIGHTENED PARENTS are exceedingly particular in every matter concerning the health of their babies. They realise that soap of the most certain purity and safety only should be used for their infants.

Vinolia Baby Soap is a well-tried and firmly-trusted line which is in constant demand by people whose custom is best worth while. You will always find that it repays recommendation and a good show — and the new 12-tablet box is particularly striking. Special display terms on application.

## Vinolia BABY SOAP

VINOLIA CO. LTD.  
BEBINGTON, CHESHIRE





# MERCOLIZED WAX

— : for the Complexion : —

and

# STALLAX

— : a Shampoo : —

**TWO** substantial and well-advertised lines which show a handsome profit to the Retailer, and, moreover, may be stocked fearlessly owing to the Manufacturers' most liberal Sale or Return Guarantee.

**Both** are obtainable in two sizes, and their reputation and sterling value assure a steady turnover.

*Order through your Wholesaler, or direct from:*

**DEARBORN (1923) LIMITED**  
**37 GRAY'S INN ROAD, LONDON, W.C.1.**

The original combined Cream and Powder

# la VELOURTY

de **DIXOR** Paris



*The advertised line that you are asked for.*

**NOW ON P.A.T.A.**

**Samples free upon receipt of trade card or billhead.**

PRICES :—Full size pot -		21/- doz.	RETAIL	2/9
Super tube	-	22/-	„	3/-
Large tube	-	14/-	„	2/-
Medium tube	-	7/-	„	1/-
Handbag tube	-	3/-	„	6d.

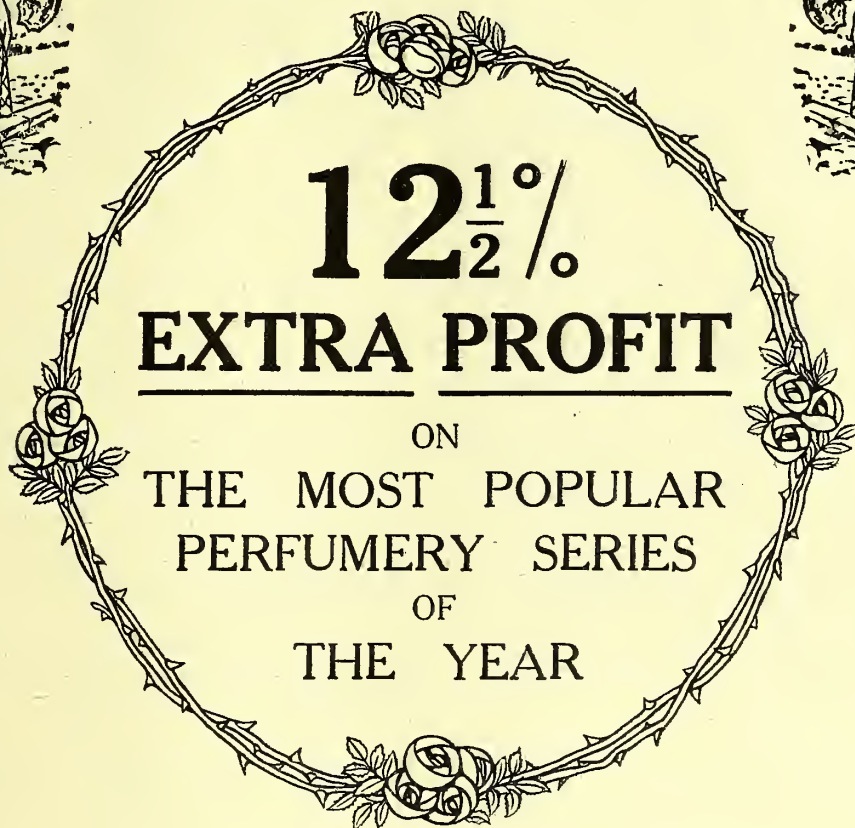
*Made in four shades :*

**WHITE, IVORY, NATURAL and OCHRE.**

*Obtainable from your regular Wholesaler or direct from the  
 Sole British Agents:*

**DEBACQ & HARROP, 68 Newman St., Oxford St., London, W.1**





**12 $\frac{1}{2}$ %**  
**EXTRA PROFIT**  
ON  
THE MOST POPULAR  
PERFUMERY SERIES  
OF  
THE YEAR

A CIRCULAR ANNOUNCING DETAILS OF

*Saville's* **June** *Perfumery*

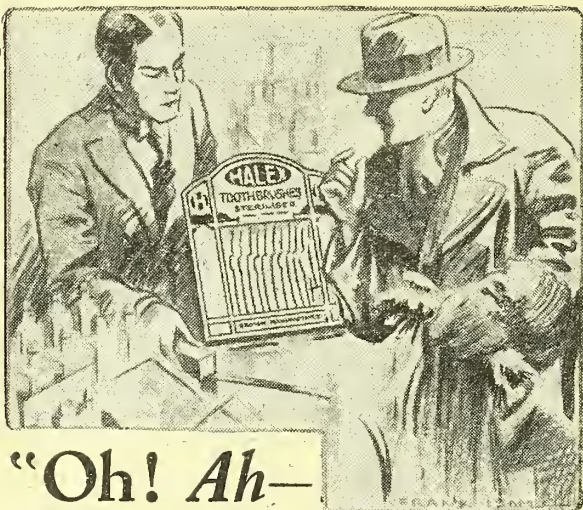
**GREAT  
EASTER BONUS OFFER**

Will be posted to every Retail Pharmacist  
on THURSDAY, FEBRUARY 28, 1929.

LOOK OUT FOR *YOUR COPY—ITS TERMS WILL INTEREST YOU.*

SAVILLE PERFUMERY, LTD. - - WATFORD, Herts.  
PHONE : WATFORD 1190.      Telegrams : Perfumery, Watford

B.11.



"Oh! Ah—  
a **HALEX!**"

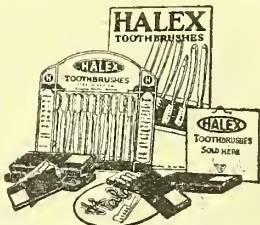
WHEN YOU ASK "Is there anything else?"—let the Halex Showcase remind him that there is. The Halex Showcase, with its attractive colour, enables you to make a direct link with our current advertising campaign.

The Halex Showcase is included, with practical display material, in the Halex Introductory Parcel. This special parcel contains an economic stock of 4-dozen Halex British-made toothbrushes.

**26/- PROFIT  
ON THE HALEX  
INTRODUCTORY  
PARCEL**

Your profit on the Halex Parcel is 5% more than the profit on the brushes if bought loose. It gives you a profit of 9½d. on each 2/- Halex brush, and an average profit of 6½d. on every Halex brush you sell!

The Halex range—6 patterns, 6 colours, 6 prices—enables you to simplify your stock and yet to satisfy any customer. Order the Halex Parcel from your wholesaler to-day and—



**INTRODUCTORY  
PARCEL - - 40/-**

Brushes sell for 66/-  
Profit on cost 65%

*keep the Halex Showcase  
on your counter*

The BRITISH XYLONITE CO. Ltd., HALE END, LONDON, E.4



## ALLWOODS' CARNATION PERFUME AND TOILET REQUISITES

Of  
Superlative  
Quality

Daintily  
Packed

Liberal  
Discount

Good show matter.  
Steady advertising.  
Carriage paid.

Produced and  
marketed by  
the World's  
leading growers  
of Carnations.

Write for Trade Prices and full information to:—

*Allwood Bros* The Leading  
Carnation Raisers  
and Specialists  
in the World.

**HAYWARDS HEATH, SUSSEX**

## Offer this

When customers ask for a colour-restorer for grey hair, or a tonic to stop falling or to promote growth, offer



### MORGAN'S POMADE

You may do so in full confidence that it will perform what it promises. 35 years' reputation, a world-wide trade, and thousands of testimonials support its claims to genuine merit.

Retail 1/9 and 3/3 per pot.  
Wholesale 14/- and 26/- per doz.

**THE MARIE ANTOINETTE CO.** 149 JUNCTION ROAD  
LONDON, N.19 (1)

(Note New Address)

## For 136 years

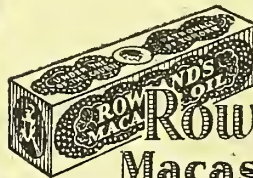
Rowland's Macassar Oil has been a favourite dressing for the hair. It keeps the hair healthy, and prevents the encroachment of greyness and baldness.

Of all Wholesalers.

RETAIL

3/6, 7/- & 10/6

P.A.T.A.

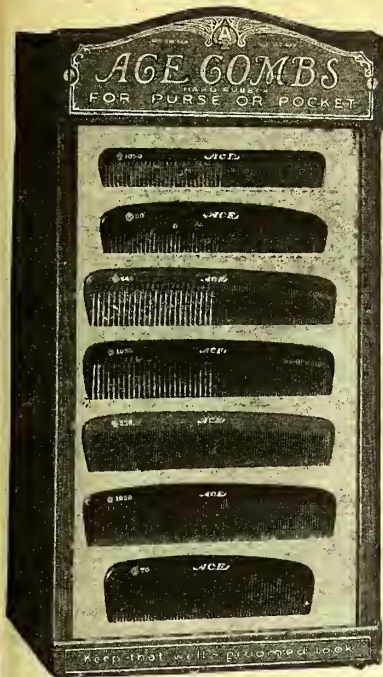


**Rowland's  
Macassar Oil**

Red for  
dark hair  
Golden  
for fair or  
grey hair

A. ROWLAND & SONS, Ltd., 112 Guilford St., London, W.C.1





The illustration on right shows rear view of cabinet. Wooden drawers provide easily accessible storage immediately behind the styles shown in the front. The show specimens as seen in the front view of cabinet are mounted on a gold background under glass. Occupies little room on counter; height 12½ ins., base 4½ by 6½

## Sell these fine quality "ACE" Combs for purse or pocket SHOWCASE FREE WITH ORDER

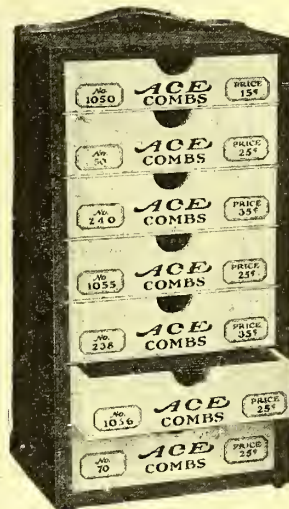
Start in on this profitable line. Fine quality combs made of ebonite—flexible, non-inflammable, brilliant hard finish. Supplied in seven styles, each with case. The ingenious showcase is free with your first order. It is permanent and not cumbersome. Re-fills can be put into the drawers at the rear. It contains seven dozen combs besides the free show samples. These come to you at 6½d. each, 45/6 the lot, and 5% discount for cash. They are easily worth a 1/- each to your customers. Supplied complete with counter cut-out and window-strip showbill.

Enquiries solicited from Buying Agents.

# ACE COMBS

TRADE MARK

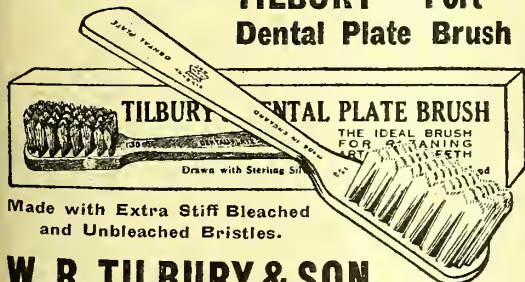
Direct from: American Hard Rubber Co. (Britain),  
Ltd., 13a Fore Street, E.C.



CA 7349

Established 1880.

### TILBURY "Fort" Dental Plate Brush



Made with Extra Stiff Bleached  
and Unbleached Bristles.

## W. R. TILBURY & SON

47 FRAMPTON PARK ROAD, HACKNEY,  
LONDON ENGLAND



Good  
light attracts  
purchasers.  
Therefore  
use

MADE IN  
ENGLAND

# PEARL MAZDA LAMPS

THE BRITISH THOMSON-HOUSTON CO. LTD.  
CROWN HOUSE, ALDWYCH, LONDON, W.C.2.

## The PERMANENT PUFF EXHIBITION.



FOR leading lines and novelties  
visit our Showrooms. You can  
always obtain

**GOOD SELLERS**

which will be right for your market  
—the largest selection at competitive  
prices.

For your Season's requirements it  
will pay you to see us.

### SPENCER BROS.

39/40 SHOE LANE  
(Holborn Circus),  
LONDON, E.C.4.

Telephone:  
Central 3469







**DO YOU STOCK  
THE FOLLOWING  
"QUICK SELLERS"?**

- "HARLENE" for the Hair
- "CREMEX" Shampoo Powders
- "UZON" Brilliantine
- "ASTOL" for Grey Hair
- "JUNOFLORIS" SPRING BREATH  
TABLETS
- "JUNOFLORIS" Dentifrice
- "ASTINE" Vanishing Cream
- "ASTINE" Tooth Cream
- "ASTINE" Shaving Stick
- "ASTINE" Nail Cream
- "HARLENE" Hair Fixative  
(For Gentlemen)
- "HARLENE" Wave Setting Lotion

# Always In Full "Sale"!

## EDWARDS' HARLENE TOILET PREPARATIONS

There is never a lull in the "Trade Wind" that keeps these World-Famous Toilet Preparations in full "Sale." The Excellence of the Products themselves, coupled with the Extensive and Continuous Advertising Campaign, keeps the "Trade Wind" always at full strength.

Thousands of new customers are introduced *every week*!

No Chemist or Store can afford to be without these World's Record Sellers!



*For Full Particulars, Terms, etc., write to:—*

**EDWARDS' HARLENE LTD.**

20, 22, 24 & 26 LAMB'S CONDUIT STREET, LONDON, W.C.1



# SULPHUR TABLETS

There are Sulphur Tablets and Sulphur Tablets. All "Burgoyne" products carry the differentiating feature of distinctive excellence.

7 lbs.	-	1/2	per lb.
14 "	-	1/1	"
28 "	-	1/-	"
56 "	-	11d.	"
112 "	-	10d.	"

Attractive show material executed in four colours accompanies all orders, a complete window display being given with 14 lbs.

---

*Further details and sample carton on application.*

---

**BURGOYNE, BURBIDGES & CO., Ltd.**

**EAST HAM, E.6**

*Established 1741.*

# To Manufacturers of Perfumery and Toilet Articles

*At this period of the year a large amount of buying is done in these articles for Overseas Trade in preparation for Autumn and Winter business.*

We are therefore arranging as usual to print a special Advertisement Supplement on Tinted Paper for distribution in our issue

**MARCH 9**

The paper selected is an old gold imitation art and the ink to be used Murillo Brown. This will make a particularly attractive display for half-tone, line, or type.

*Here is an opportunity for English Manufacturers to show their goods to many hundreds of Overseas Buyers it is impossible for them to reach by other means. Full details of space still available, also charges, are obtainable from*

The Publisher

**THE CHEMIST AND DRUGGIST**  
42 CANNON ST. LONDON, E.C.4



# ENO'S "FRUIT SALT"

is made by a company who make nothing else and whose mind and purpose are wholly bent on making this one thing well. *Practice for more than 60 years has made perfect.*

## DISPLAY IT—IT PAYS



For particulars of  
Window Display Offers, etc., write :—  
Sales Manager, J. C. Eno, Ltd.,  
160 Piccadilly, London.



# INFLUENZA

## Litmopyrine (BISHOP) for successful treatment

### Antipyretic. \* \* \* \* \*

Litmopyrine effects most rapid temperature reductions. The fall begins about fifteen minutes after administration reaches the minimum within the first hour, and lasts for three to four hours, at expiration of which period the dose may be repeated if necessary.

### No Harmful By-effects. \* \* \*

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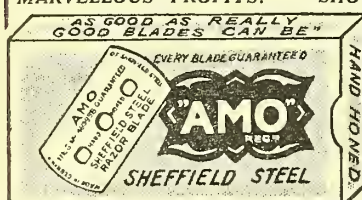
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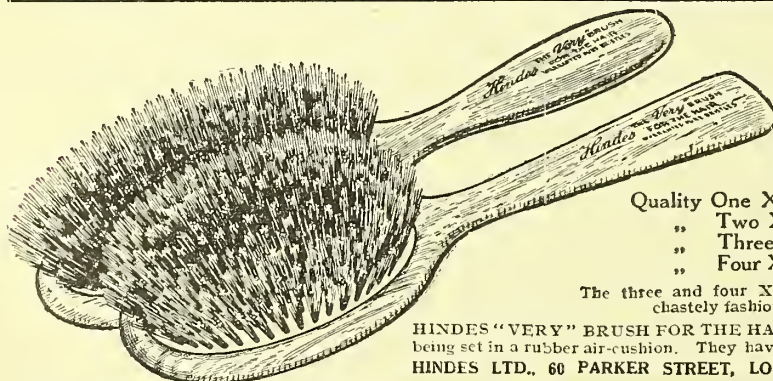


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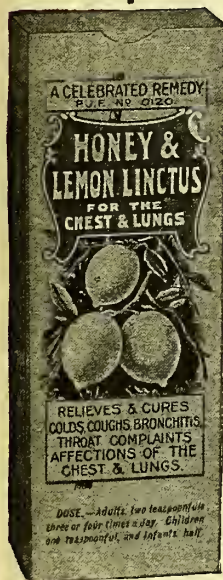
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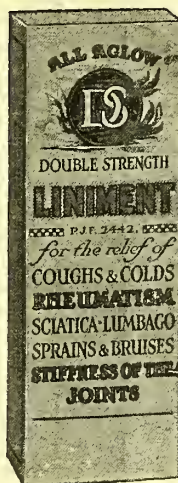
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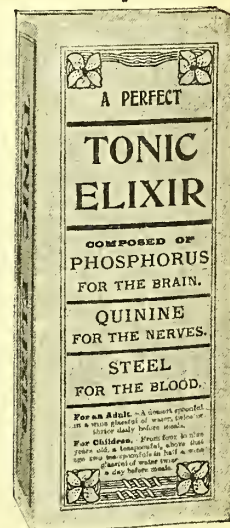
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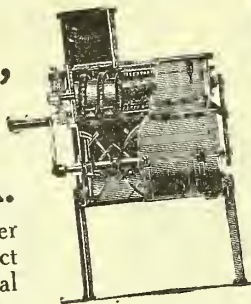
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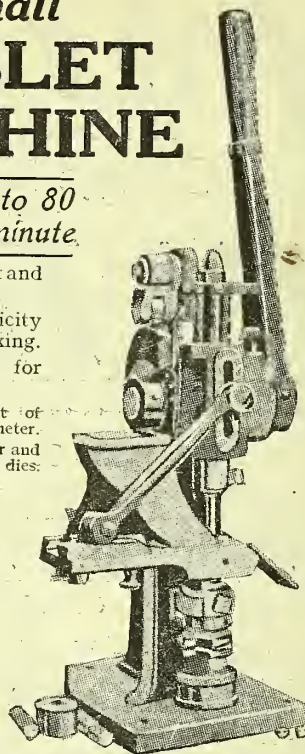
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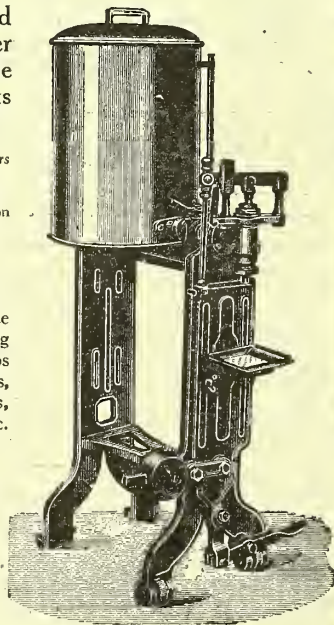
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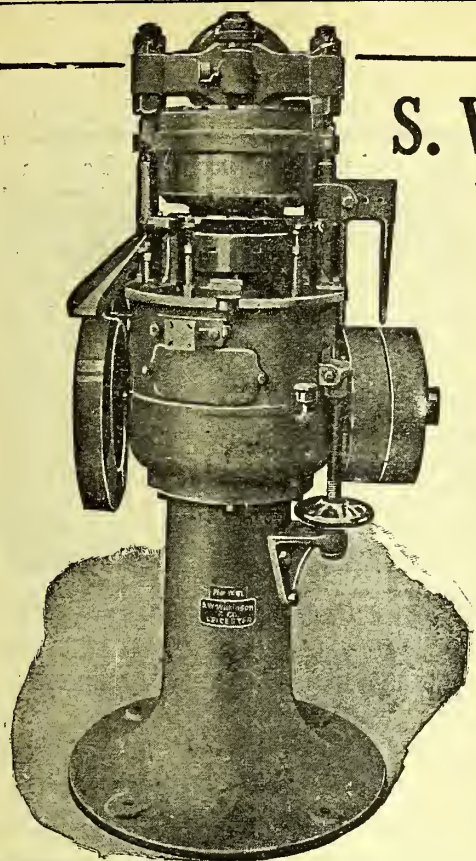
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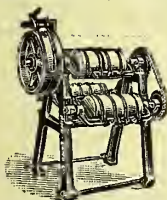
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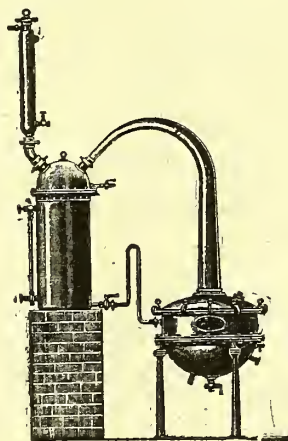
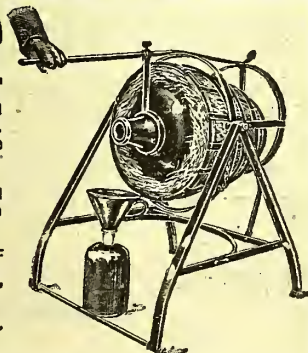
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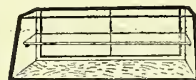
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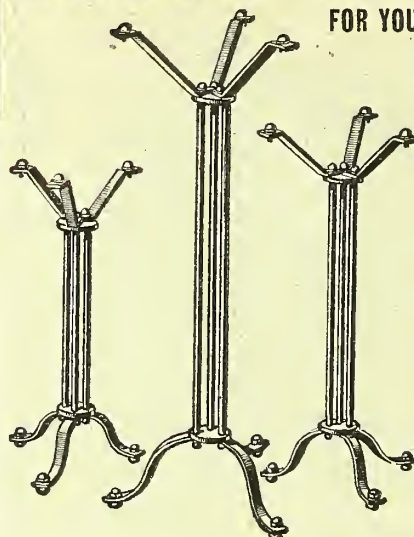


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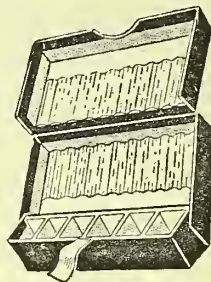
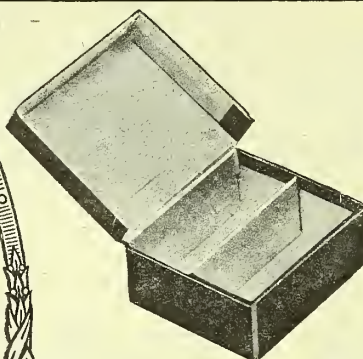




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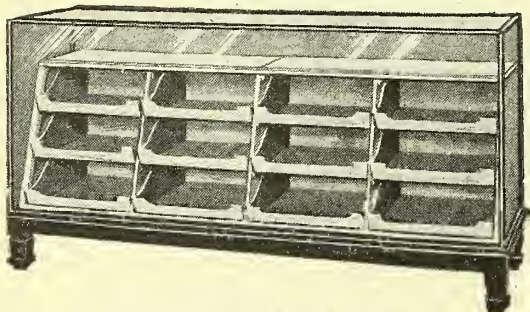
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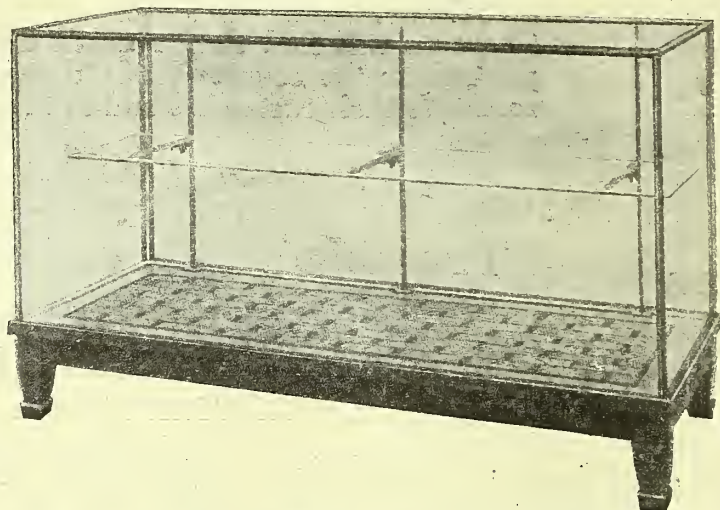
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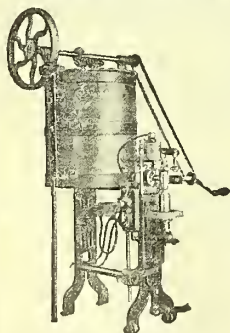
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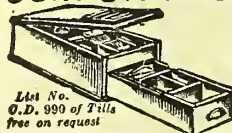
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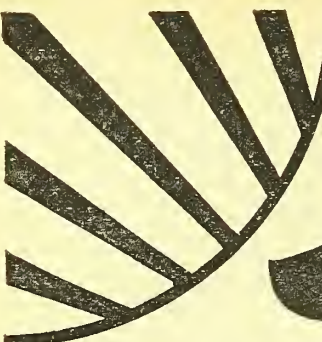
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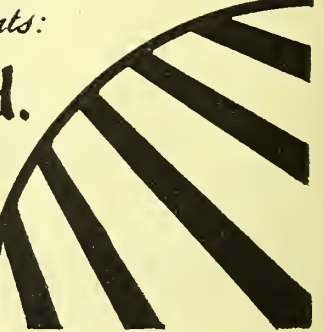
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No. 8	Contents	Vol. 110
	Series 2559	
Agricultural Notes	226	Indian Shellac
American Notes	216	Insurance Act Dis-
American Tariff Re-		pensing
vision	241	Irish News
A New Zealand		Legal Reports
Holiday	227	Marriages
Births	230	Narcotics in South
Book-keeping for		Africa
Chemists—II	224	Observations and Re-
British Industries		flections
Fair	235	Ortho, Meta, Para—V
British Trade in		Personalities
Essential Oils	220	Pharmaceutical
Business Changes	234	Society of Great
C. & D. Commercial		Britain
Compendium	249	Pharmaceutical
Colonial and Foreign		Society of Ireland
News	216	Pharmaceutical
Coming Events	214	Society of Northern
Company News	217	Ireland
Correspondence	247	Retail Pharmacists'
Deaths	230	Union
Editorial Articles:—		Retrospect
Iodine Nutrition	232	Scottish News
The Iodine Indus-		Symbiosis
try	233	Trade-marks
Lemon Oil Adul-		Trade Notes
teration	234	Trade Prospects with
English News	213	India
Festivities	218	Trade Report
French News	215	Westminster Wisdom
German Tartaric		Wills
Acid	242	Winter Session

## Westminster Wisdom

### Notes on Parliamentary Matters

#### SHOPS (SUNDAY TRADING RESTRICTION) BILL

A Bill "to restrict the opening of shops and trading on Sunday; and for other purposes connected therewith" was introduced in the House of Commons on February 14. The Bill was presented by Sir Frank Sanderson, and was supported by Sir Herbert Nield, Sir Arthur Shirley Benn, Colonel Freemantle, Mr. Ammon, Mr. Robert Morrison and Mr. Crawford.

#### "DANGEROUS" DRUGS

Mr. R. Morrison asked the Home Secretary, on February 18, the number of convictions during the past twelve months for illegal possession of cocaine and similar drugs; and whether this traffic has decreased?

Sir W. Joynson-Hicks replied that the statistics in question are not yet available. While it is not possible to speak positively in a matter of this kind, the experience gained in the administration of the Dangerous Drugs Acts indicates that the illicit traffic in these drugs has very much diminished in this country since the institution of control.

## English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

### Wine-Licence Applications

Among the applications for wine off-licences at the recent local Brewster sessions, those on behalf of the following chemists (or drug departments) have been granted, subject in most cases to the sales being restricted to medicated wines:—Mr. W. A. Bales, Coventry; Lincoln Co-operative Society, Ltd.; Mr. H. Lund, Bolton; Mr. W. H. Martin, Lincoln; Oldham Equitable Co-operative Society, Ltd.; Mr. B. Pollard (Dewsbury Pioneers' Industrial Society, Ltd.); Mr. A. A. Rhodes, Brigg; Miss A. N. Sellers, Coventry; Mr. E. Thompson, Coventry; Mr. T. S. Wright, Haslingden.—The applications of the following have been refused:—Messrs. W. Haigh, Huddersfield; E. Jones, Llanelli; B. T. Luxton, Exeter; Meltham Co-operative Society, Ltd.; J. W. Moffitt, Stockton-on-Tees; Miss E. W. Gittins, Croydon.

### Inquests

The Brighton coroner held an inquest, on February 19, on the body of Mr. A. E. Bird, chemist and druggist, King's Road. A medical witness expressed the view that death was due to hydrocyanic acid poisoning. A verdict of "Suicide while of unsound mind" was given.

Other cases include poisonings by means of veronal (accidental) and morphine with veronal (suicidal).

### Contracts

The following tenders have been accepted by the bodies named:—

Ellesmere Port Cottage Hospital.—*Drugs, etc.*—Mr. H. W. Wallis, chemist and druggist.

London County Council.—*Drugs, etc.*—Anglo-American Oil Co., Ltd.; John Bell, Hills & Lucas, Ltd.; Burgoyne, Burbidges & Co., Ltd.; Evans Sons Lescher & Webb, Ltd.; General Chemical & Pharmaceutical Co., Ltd.; John J. Griffin & Sons, Ltd.; Harrington Brothers, Ltd.; Johnson & Sons, Manufacturing Chemists, Ltd.; Alfred White & Sons, Ltd. *Apparatus*.—Brown & Son (Alembic Works), Ltd.; Eureka Scientific Glass Co.; A. Gallenkamp & Co., Ltd.; J. W. Towers & Co., Ltd.; Townson & Mercer, Ltd.; R. B. Turner & Co. *Thermometers*.—A. C. Cossor & Son.

Northampton General Hospital.—*Drugs*.—Burgoyne, Burbidges & Co., Ltd. *Disinfectants*.—Newton, Chambers & Co., Ltd.

### Liverpool

With a view to the formation of a Wallasey branch of the Photographic Dealers' Association, a meeting is to be held under the auspices of the Wallasey Pharmacists' Association at Earlston Library on March 7.

A great trade has been done during the frost by local chemists, following an announcement that the best way to prevent the freezing up of meters was to pour in 2 oz. of glycerin. One chemist, it is understood, sold in a week ten gallons of glycerin in 2-oz. quantities.

The annual general meeting of the Liverpool Pharmacy Club was held recently. Certain alterations in the rules were approved, and the officers for the coming year were elected as follows:—*President*, L. D. Houghton; *Vice-President*, C. H. Leggett; *Treasurer*, Miss M. Dodd; *Secretaries*, Miss C. Canning and Miss E. Dobie; *Committee*, K. Price, E. Riley and W. Scott.

A man entered a chemist's shop with his nose bleeding badly. He was in a funk. The chemist applied the usual remedies and stopped the bleeding. Asked if there was anything to pay, he replied that the usual charge for what had been used was sixpence. The man said he was sorry he had no money with him, and went off, saying he would call next day. He has not been seen since, however.

Pharmacy students at Bradford Municipal Technical College and Part I students at Leeds Municipal Technical College formed a party who on February 12 visited Liverpool to see the making of galenicals at the



laboratories of Evans Sons Lescher & Webb, Ltd. The party was accompanied by Mr. J. A. White, chairman of the Bradford and District Branch of the Pharmaceutical Society, and by the lecturers in pharmacy at the Bradford College, Messrs. J. R. Elliott, Ph.C., J. W. Cooper, Ph.C., and T. C. Denston, Ph.C. The morning was spent in a visit to the Liverpool Cathedral and an inspection of the Canadian Pacific liner "Minnedusa" in the Gladstone Dock. An interesting afternoon was spent at the laboratories of Messrs. Evans, under the guidance of Mr. Sendall (works manager), and afterwards the company entertained the visitors to tea at the Bear's Paw. On behalf of the gathering, hearty thanks to their hosts were tendered by Mr. White, seconded by Mr. Smith. Mr. W. Brinson (a director of Evans Sons Lescher & Webb, Ltd.) responded.

#### Miscellaneous

**STAFF FUNCTION.**—The directors of Scott & Turner, Ltd., gave their annual New Year's party to the employees recently, the function having been postponed to enable Mr. Gerald France (chairman) to be present. An entertainment was given by the "Andrews' Follies," and dancing followed.

**FIRES.**—The premises occupied by Grossman's Drug Stores, 116 Whitechapel High Street, London, E., were involved in an outbreak of fire on February 15. The cause of the outbreak is unknown.—An outbreak of fire occurred recently at the premises of Mr. J. F. Wharton, chemist and druggist, Chesterfield. The damage was not of an extensive nature.

**INDUSTRIAL DESIGNS COMPETITION.**—The sixth annual competition in industrial designs under the auspices of the Royal Society of Arts will be held in June at the Imperial Institute, South Kensington, London, S.W. Intending competitors may apply to the secretary of the Society, John Street, Adelphi, W.C.2, between May 1 and May 11, for entry forms.

**IN THE COURTS.**—At Blackpool, on February 16, William Allen (17), Saville Road, was bound over on a charge of breaking into the shop of his former employer, Mr. Fred Dickinson, chemist and druggist, Church Street, and stealing the sum of £6.—At Stoke-on-Trent, recently, Mr. Harold Walker, Ricardo Street, Hanley, and Thomas Leicester, Ltd., wholesale chemists, Market Place, Burslem, were each fined £1, with costs, in respect of a sale of Wincarnis with Quinine without holding a wine licence respectively.

**PROPOSED CHANGE OF LATE SHOPPING EVENING.**—At a conference of the Blackburn Chamber of Trade, held on February 13, a proposal to change the late shopping evening from Saturday to Friday was discussed, and the pharmacists present voted against the suggestion. Mr. Turnbull (Boots, Ltd.) said that already the variation in the hour for Thursday closing among pharmacists led to considerable confusion on the part of the public. He found that Saturday was infinitely the better shopping night. The Chamber passed a resolution opposing the application owing to the confusion which such a system would cause.

## Scottish News

#### Brevities

Mr. William Scott has opened a pharmacy in Main Street, Rutherglen. [Corrected note.]

Mr. Alexander Paterson, "Preston," Catherine Street, Motherwell, has been appointed as the new Scottish representative for Arthur H. Cox & Co., Ltd., manufacturing chemists, Brighton.

Under the pseudonym of "Panel Chemist" a letter appeared in the "Ayrshire Post" of February 15 refuting a former accusation that a chemist had been guilty of "gross carelessness" in dispensing a prescription.

The final meeting of the executive committee of the Glasgow Lister Memorial Fund (founded in 1912) was held in the City Chambers on January 27. It was decided to offer the collection of relics of Lord Lister to the University of Glasgow for permanent custody.

## Irish News

#### Brevities

Mr. Michael Kennedy, who has been manager of O'Sullivan's Medical Hall, 4 The Mall, Waterford, for ten years, has purchased the business.

Members of the Chemical Society of Ulster paid a visit on February 12 to the British Aluminium Company's Works at Larne Harbour, where they were shown over the establishment.

At the annual meeting of the North of Ireland Branch of the National Federation of Sub-Postmasters in Belfast, on February 13, several members of the drug trade, who are also sub-postmasters, took a prominent part. Mr. J. Moffett, chemist and druggist, Donegall Road, Belfast, was elected vice-chairman for the ensuing year, and among those appointed to the committee was Mr. J. F. Grimes, J.P., who is a member of the Council of the Northern Ireland Pharmaceutical Society.

Mr. R. F. Blake, public analyst, in his quarterly report to the Tyrone County Council, states that of 416 samples received for analysis 46 were drugs. The drug samples included cream of tartar, 10; olive oil, 5; castor oil and Epsom salts, three each; seidlitz powders, liquorice juice, glycerin, sodium sulphate, tincture of iodine, two each; tartaric acid, magnesia, crushed linseed, Gregory's powder, cod-liver oil, linseed oil, sulphur, spirit of nitrous ether, tincture of iron, Easton's syrup, syrup of figs, tincture of nux vomica, saltpetre, one each. All were found correct except one sample of spirit of nitrous ether, which contained only 1.27 per cent. by weight of ethyl nitrite.

#### Belfast

During a recent discussion on shops' closing hours at the Belfast and District Chamber of Trade, Councillor Cheyne said he thought the experience of the chemists should be a guide to other people. The position, it was found, led to a great deal of confusion and annoyance. Many of the chemists would rather not be open at all at the later hours. It did not pay them. Shops should be either closed or open.

The "Belfast Gazette," of February 16, gives notice that the Minister of Home Affairs has made Regulations under Sections 3 and 7 of the Dangerous Drugs Act, 1920. The Regulations are entitled the Raw Opium, Coca Leaves, and Indian Hemp Regulations (Northern Ireland), 1929, and the Dangerous Drugs Regulations (Northern Ireland), 1929, respectively. Copies of the Regulations were not obtainable at the time of going to press.

## Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

#### Wednesday, February 27

South-West London Chemists' Association, Crown Room, Holborn Restaurant, London, W.C.1. Annual dinner.

Edinburgh Chemists', Assistants' and Apprentices' Association, 36 York Place, Edinburgh, at 8 p.m. "Discussion on Pharmaceutical Training," to be opened by Mr. T. Wilson.

Royal Society of Arts, John Street, Adelphi, London, W.C.2, at 8 p.m. Mr. A. F. Suter on "East Indian Copals and Damars."

Pharmaceutical Society of Great Britain, Reigate, Redhill and District Branch, Laker's Hotel, at 6.45 p.m. Address by Mr. T. Hardy on "The Chemists' Sickness and Provident Society." Supper. Tickets 4s. 6d. each.

Manchester and District Pharmacy Club, Clydesdale Club, at 5 p.m. Discussion on "Window Dressing."

Manchester and Salford Pharmacy Tennis Club, Clydesdale Club, Tower Street, at 9 p.m. Election of officers.

#### Thursday, February 28

Western (London) Pharmacists' Association, 192 Oxford Street, W.1, at 8.30 p.m. Dr. C. H. Hampshire, B.Sc., F.I.C., on "New Therapeutic Agents and Methods."

Pharmaceutical Society of Great Britain, Halifax and District Branch, Old Cock Hotel, at 6.15 for 6.30 p.m. Annual dinner. Tickets 7s. 6d. each.



## French News

From the "C. & D." Paris Correspondent.

THE continuation of the severe weather and consequent pulmonary troubles has induced the Prefect of Police to authorise the opening of all Parisian pharmacies for a third Sunday. The Assistants' Association having drawn attention to their deprivation of Sunday, the Prefect has stated that the care of the health of the population must override all other considerations. He has, however, consented to receive a deputation of assistants, and at the same time the delegates of the Pharmacists' Association, with a view to adjusting matters in a satisfactory manner.

THE DEATH is announced at the age of sixty-six of M. Henri Gautier, professor of inorganic chemistry at the Paris Faculty of Pharmacy since 1900, and for twelve years Director of the Superior School of Pharmacy. He resigned in favour of M. Radais, the present Dean of the Faculty, in 1922. M. Gautier commenced his career at the Faculty in 1889 as assistant-professor, was appointed to the vacant chair of Toxicology in 1900, but exchanged it in the same year for the chair he so long occupied. He was not married and lived for many years in the quiet rue de Vaugirard with his mother and sister. He was a permanent member of the Codex Revision Committee since 1910.

FIRST-AID BOXES FOR MOTORISTS.—The Prefect of the Meuse Department has issued a circular in which he alludes to the fact that first-aid posts have been organised round about Paris, and while not proposing to follow suit in his comparatively rural district, he wishes to draw the attention of all road-users to the utility of having medicaments handy. He therefore recommends all public vehicles to carry a first-aid box similar to the one which has already been issued to Government-owned cars, and advises all owners of private cars to carry a small case containing four ampoules of tincture of iodine, four of ether for external use, a bandage, two packets of gauze and one of cotton, and a vial of spt. menthae. He adds that the law does not allow him to make this precaution obligatory, but its advisability will be apparent.

PROFESSOR PERROT presented to the Paris Society of Pharmacy the report of the French delegation (which consisted of M. M. Brémar, de Pummeyrul and himself, to the Buda-Pesth Congress on Medicinal Plants. He commented on the subsidies accorded by certain foreign nations to the gathering and culture of indigenous medicinal plants as compared with the sum granted by the French Government. He drew the attention of the Society to the project of an International Federation proposed at the Buda-Pesth Congress, and thought this matter should be seriously studied by French pharmaceutical bodies, so that the French Delegation at the next Congress (at Padua) could either decline to join in this international movement or, on the contrary, take it up seriously and on an extensive scale. He hoped that the Paris Society of Pharmacy would nominate a Committee to examine this question.

RURAL FRENCH PHARMACISTS interested in mycology are usually ready to give technical advice to prospective mushroom gatherers, gratuitously of course, and doubtless thereby frequently render public service. But the practice has its dangers. M. Chauvin cites a recent case in which the husband of the person poisoned claimed 5,000 francs damages from the pharmacist, although the accident had not a fatal conclusion. Luckily the pharmacist had taken out a policy covering professional accidents, and the insurance company satisfactorily arranged matters. This case was also interesting as drawing attention to Dr. Dujarrie de la Rivière's anti-phalloidum serum, which is supplied gratuitously to medical men by the Pasteur Institute. The accident was attributed to *Amanita citrina*, but there seems to be no doubt that *A. phalloide* was the real cause. The twelfth Hygiene Congress passed a resolution that supplies of this serum should be kept in hospitals.

ONE OF THE most curious differences between English and French legislation lies in the method of its enforce-

ment. In France, where centralisation is such a leading characteristic, Acts seem simply to embody general principles which are applied more or less gradually and more or less severely by the executive under ministerial guidance. The "Eight Hours Act" is now many years old. At first it was thought impolitic to apply it to pharmacies. The old-fashioned idea that the pharmacist must always be on duty was considerably modified by war-time conditions, and it was finally decided that the extension of the Act was practicable. Hours of work were gradually reduced year by year, until now we have, roughly speaking, a nine-hours' day, e.g., 8 a.m. till noon and 2 to 7 p.m. The question of the rigorous enforcement of the eight-hours' principle is now under discussion. The pharmacists hold out for exception in the case of small communities where only one pharmacy is available, and of places which are tourist or seaside resorts during the seasons, and for a few minor concessions. It is to be noted that the authorities here consider trade associations as the competent and authorised mouthpieces of the professions involved, a detail which considerably facilitates discussion and mutual concession, especially on points where the interest of the outside public is not at stake.

LEARNING that M. Barthet, president of the General Association of Retail Pharmacists, had returned to Paris, I called on him at his pharmacy opposite the Parc Monceau to hear his impressions of the recent annual gathering of the Association at the Paris Faculty of Pharmacy. These meetings, I was aware, are usually more interesting as affording an opportunity for interchange of opinions and ideas than from the novelty of the subjects discussed. The foundation of an Order of Pharmacists and of Boards of Discipline empowered to police the profession, the more equal repartition of pharmacies over France by limitation, the creation of a State diploma of doctors in pharmacy, and the preparation for defending pharmaceutical interests in connection with the proposed scheme of "assurances sociales" are all matters which usually appear on the agenda. "But what gave a special interest to the 1928 meeting," said M. Barthet, "was the fact that it coincided with the first occasion on which the International Pharmaceutical Federation has met at Paris. This body held its meeting in the Salle des Actes, which is hung with historical portraits of French pharmaceutical worthies and included delegates from fourteen nations. The principal subjects discussed on the second day—the first day was devoted to scientific papers—were a model pharmacy law and an international formulary. Not an international pharmacopœia, but a formulary of medicaments which, though not figuring in the official volumes, are so frequently prescribed that doctors do not always trouble to specify the exact details. You will readily understand that in such a case it is important that an invariable and international standard should exist, otherwise, were a prescription written in Switzerland and, for instance, dispensed in Paris, the dose might not be the same. It was decided to put this work in hand." "And there was no doubt a social side and a reception of the foreign delegates?" "Quite so. To begin with, it was the fiftieth anniversary of the foundation of our Association. So we had a meeting in the great amphitheatre of the Sorbonne. I made a speech, M. Collard, our secretary, retraced the history of our Association, and M. Radais, Dean of the Faculty of Pharmacy, spoke on the subject of our profession. We had the famous band of the Garde Republicaine, and the soirée terminated with a performance by various stars of the Parisian stage. Just before this we had been to the Hôtel de Ville, where we were officially received by the vice-president of the Municipal Council; and I spoke for my French colleagues and Professor Van Itallie (of Leyden) for the foreign delegates. We visited the Pasteur Institute at Paris and its branch at Garches, whence we went on to Versailles. Another trip was organised by steamer to Longchamps, where we lunched. Finally, we had a pleasant outing to the Châteaux of Chantilly and of Chaalis, a delightful rural drive, as you know, ending up at the charming old-world village of Ermenonville, the last residence of Jean Jacques Rousseau, where a professor of the Sorbonne gave us a lecture on the famous philosopher. The lady visitors were taken round some of the principal buildings of Paris."



## Colonial and Foreign News

**SODIUM SALTS PRODUCTION IN ITALY.**—Prior to 1919 no sodium carbonate was produced in Italy. In that year the Solvay Co. completed its plants at Rosignano and in 1925 the Monfalcone plant of the Adria company, which was severely damaged during the war, renewed operations. Production of sodium carbonate rose from 5,200 tons in 1919 to 147,000 in 1926. The annual capacity of the plants in 1926 was 220,000 tons. Italy was formerly a heavy importer of sodium carbonate, and in 1920 imported 34,252 tons from other countries, but with the rise of the domestic industry imports declined steadily, and by 1926 dropped to only 13 tons. Exports are relatively small and have remained practically stationary. About one-third of the sodium carbonate produced in Italy is converted into solid caustic soda. Sodium bicarbonate is produced by the Distillerie Italcane at their Sesto San Giovanni plant.

**BRITISH HONDURAS CHICLE.**—In a colonial report dealing with the trade of British Honduras for 1924, it is stated that the exports of chicle of domestic origin show no very marked fluctuations during the last five years. The productive capacity of most of the forest areas yielding gum of first quality has been seriously impaired by destructive tapping, and a drop in the output of superior gum is inevitable. Investigation of the possibilities of regulated treatment as a forest crop of the sapodilla tree (*Achras Zapota*) from which the gum is derived, and of less destructive methods of bleeding, continues. Fairly large resources of sapodilla yielding an inferior grade of gum remain in the western highlands of the Colony, and it is not impossible that chemical research on the treatment of the latex may result in improvement of the quality sufficiently to enable this gum to compete in the market more successfully than hitherto. The exports during 1927 amounted to 450,175 lb. (\$204,618), against 259,845 lb. (\$111,943) in 1926. In 1927 the U.S.A. imported 424,314 lb., Canada 26,083, and the United Kingdom 9,738 lb.

**CELLULOID GOODS IN CHINA.**—More than half a million dollars' worth of celluloid articles are yearly imported into Shanghai, principally from Japan, with a small balance from Germany, Great Britain and the United States. The Japanese products come from Tokio and Osaka. Tokio supplies products chiefly from large and well-equipped plants, and hence they are far superior in quality and appearance to the Osaka goods, which are turned out by smaller and rather poorly equipped plants. It is estimated that about 60 per cent. of Japanese celluloid articles comes from Tokio, 30 per cent. from Osaka, and the remaining 10 per cent. from the other Japanese ports. The popularity of the Tokio products is due to their good appearance and reasonable prices. The German celluloid articles are of much superior quality to the Japanese, but more costly, and hence not popular. An attempt was therefore made by a group of German importers to take advantage of the cheap labour by establishing a factory in Shanghai to turn out articles from imported raw materials, but they were unable to compete with the Japanese products, and the plant was closed. Goods from Great Britain and the United States are also of the costly kind and cannot become popular. They consist of cigarette cases, cases for toilet articles, etc. Chinese dealers in Shanghai obtain celluloid articles from local foreign firms, such as Carlowitz & Co., Siemssen & Co., and China Export, Import & Bank Co., Ltd., for German articles and Iwai, Kyowa, etc., for Japanese goods. German goods are usually ordered by forward contract. From one-third to one-half of the purchase price is paid on delivery of goods, and the balance is settled by the end of the month. Japanese goods are sometimes ordered by forward contract and sometimes sold by Japanese importers for spot delivery. Each of the three German firms referred to above import about the same quantity every year, while among the Japanese importers, the Kyowa claims a large share, amounting to about 30 per cent. of the total Japanese import, the Iwai 20 per cent., the other three or four Japanese firms 20 per cent., and the Chinese importers who have agents in Osaka and Tokio the remaining 30 per cent. The Kyowa has won great popularity among Chinese merchants.

## American Notes

A CHAIR OF CHEMICAL EDUCATION has been established at John Hopkins University, Baltimore, and Professor Neil E. Gordon has been appointed to occupy that position. It is the first chair of its type in the United States.

DR. KAMM, of the research laboratories of Parke, Davis & Co., has been awarded the annual prize of \$1,000 by the American Association for the Advancement of Science for his work in an investigation of the ductless glands, and particularly for his isolation of two active hormones from the posterior lobe of the pituitary gland. Dr. Kamm's paper, which was selected from over 2,000, dealt with both alpha and beta hormones—now known as Pitocin and Pitressin.

DEAN OF PHARMACY COLLEGE ON TRAFFIC.—Professor Frederick J. Walling, dean of the college of pharmacy at the University of Minnesota, is taking a lively interest in traffic problems. A local newspaper recently published an account of his activities in this "safety first" campaign. Professor Walling has talked on the problem on every possible occasion, and has delivered lectures over the radio. His latest attempt to focus public attention on correct behaviour in the streets consisted of the distribution of leaflets on which a reprint of an editorial on the subject appeared.

MAGNUS, MABEE & REYNARD, INC., essential oil distillers, etc., New York, send us a copy of the programme of their ninth annual sales and staff convention, which was held on December 20, 21 and 22. An educational programme was put through consisting of new sales ideas, the procedure of importing and exporting merchandise, problems relating to traffic, demonstrations covering the chemistry of essential oils and related products, and contributions from the salesmen with a view to aiding the officers of the company in laying down a comprehensive programme for building business in 1929. The convention, which was considered the most satisfactory yet held, concluded with a dinner-dance.

SCOTT'S EMULSION.—The Federal Trade Commission has ruled against Scott & Bowne, of Bloomfield, N.J., manufacturers of Scott's Emulsion and other medicines, in the maintenance of uniform resale prices, which the commission claims has the effect of unduly lessening competition, and prohibiting the practice of procuring promises or assurances that the prices specified by it will be observed by customers.—The United States Patent Office has refused the company permission to register the words "Milk of Cod Liver Oil" as a trade mark for a medicinal cod-liver oil preparation. A decision written by the Commissioner of Patents quotes the Standard dictionary's definition of "milk" to show that in pharmacy it is used to describe emulsions of milk-like preparations, and referred to a number of instances where "milk" is used in medicine as a descriptive term.—According to the "Practical Druggist," recent articles regarding the sale of the company have led the public to believe that the American company have been sold. There has, it is stated, been no change or sale of the American business.

TWO INVOICES OF 1785.—Edward Kremers, in a paper before the American Pharmaceutical Association, pointed out that it was well known that at this period the American colonies were dependent on their respective mother countries for medical supplies. This was as true of New England as of New France and New Spain. Documents revealing the drugs and medicaments imported and the amounts shipped in a single order, however, are anything but common. The lists of the Sister Hospitalieres, Quebec, show what they asked for, but so far there has been no evidence of what they received. It is known that Dr. Morgan, when he returned to Philadelphia, induced an English apothecary to come with him and that the latter had a supply obtained from Sylvanus and Timothy Bevan of London. But as to the nature of his medical armamentarium we are in ignorance. It is a pleasure, therefore, to be able to announce the gift to this country of two invoices of this firm: the one pertaining to a shipment of goods to the Marshalls, the other to a similar shipment to Bartram. For these we are indebted to Allen & Hanburys, Ltd., the present-day successors to S. & T. Bevan.



## Legal Reports

**Calomel Ointment.**—At Bow Street Police Court, London, on February 18, Boutalls, Ltd., 150 Southampton Row, W.C.1, were represented on an adjourned summons for having sold calomel ointment alleged to be deficient in mercurous chloride to the extent of at least 51 per cent. (*C. & D.*, February 2, p. 120). Mr. H. Hawkes, for the Holborn Borough Council, said the case had been adjourned for a report by the Government analyst. That report had only just been received, and there had not been time to consider it. He therefore applied for a further adjournment of the summons to March 4. Mr. C. H. Kirby, for the defendants, concurred, and the hearing was adjourned accordingly.

**Compound Syrup of Figs.**—At Toomebridge (co. Antrim) Petty Sessions, recently, Mr. James McCann was summoned for selling, to the prejudice of the purchaser, syrup of figs which was not of the nature, substance and quality of the article demanded, contrary to the Sale of Food and Drugs Act, 1875. Mr. John P. McCann defended. The inspector stated that on December 22 he took a sample of syrup of figs from Mrs. McCann, and sent it to the analyst. The analyst's certificate stated that he was of opinion the sample contained percentages of foreign ingredients as under: 0.194 per cent. of salicylic acid, equivalent to 1,940 parts per million. The analyst added that syrup of figs of genuine composition should not contain salicylic acid. Mr. McCann said that on the bottle were the words "Compound Syrup of Figs." Syrup of figs was not a standardised medicine, and was not mentioned in the British Pharmacopœia. If it had been mentioned in the Pharmacopœia the ingredients necessary for its composition would have been given. But it was not standardised by any means. There were dozens of makes of syrup of figs, and every wholesale chemist made it up from his own ingredients. Salicylic acid was a powerful antiseptic, and that was the object of introducing it into the bottle. It was a necessary ingredient for that purpose. The word "compound" on the label showed that the article was mixed and no offence was committed. The Magistrate: How is an ordinary purchaser going to get pure syrup of figs? Mr. McCann replied there was no such thing. The sergeant was bound by the notice on the bottle, "Compound." The Magistrate: The analyst says it is not genuine. Mr. McCann: What does he know about it? There is no standard medicine known as syrup of figs. Salicylic acid is not injurious, and there is no doubt that no offence has been committed. The magistrate said he did not look on the label to see what was in the bottle. Mr. McCann said he had made inquiries from chemists, and they were of opinion there was no such medicine as syrup of figs. They were all mixed. When there was a label on the bottle by which the purchaser could see what was in it, there was no offence committed. The defendant said he had been selling syrup of figs for some time. The Magistrate: Does all syrup of figs contain the acid? Mr. McCann: I am inclined to think a good many of them do, but there are different ingredients. The Magistrate: Can you tell me what genuine syrup of figs is? Mr. McCann: No one could tell you what it is. Dismissing the summons, the magistrate said he felt sure that the sergeant asked for syrup of figs and got this compound, and the defendant thought it was the right thing or he would not have done it. He was not inclined to convict, and if the inspector had a grievance he could come back again.

**HOW TO BECOME INSPIRED.**—"Domino." of "The Evening Standard," quotes Dr. Michele Martinez, who is living in the London flat previously occupied by Mr. Bernard Shaw:—"Men and women come to the flat, believing that Mr. Shaw still lives there, and try to make me read their plays, or listen to the story of their lives. . . . On the other hand, how great the compensations! Why, I had been in Mr. Shaw's flat only a few days when I hit upon a chemical formula which had eluded me for years!"

## New Companies and Company News

**P.C. means Private Company and R.O. Registered Office.**

**JOHN R. RANDALL & Co., LTD. (P.C.).**—Capital £500. Objects: To carry on the business of dispensers and sellers of medicines, drugs, chemists' sundries, wines, spirits, etc. The directors are: F. Murphy and Gladys E. Randall.

**GUENEUX (ENGLAND), LTD. (P.C.).**—Capital £20,000. Objects: To adopt an agreement with Societe Gueneux, and to carry on the business of perfumers, etc. The subscribers are: H. J. Fellows and A. J. Wildey. Solicitors: Denton Hall & Burgin, 3 Gray's Inn Place, W.C.

**B.M. CHEMICAL PRODUCTS, LTD. (P.C.).**—Capital £1,000. Objects: To carry on the business of manufacturing chemists, manufacturers of and dealers in chemicals and chemical preparations, etc. The subscribers (each with one share) are A. L. Read and W. A. Woodrow. R.O.: 7 Victoria Street, S.W.1.

**MARTINS FERTILISERS, LTD. (P.C.).**—Capital £1,000. Objects: To carry on the business of manufacturers of, agents for and dealers in fertilisers, chemicals, grain, cattle foods, forage and farm and vegetable products, etc. The directors are C. W. Martin and E. V. Booth. R.O.: Crown Bottom, Holmfirth, near Huddersfield.

**DELSHIRE, LTD. (P.C.).**—Capital £1,000. Objects: To acquire the business of chemists' sundriesmen carried on by P. A. Jeandel and S. Wiltshire at 88 Charlotte Street, Fitzroy Square, W., as "P. Jeandel & Co." The permanent directors are: P. A. Jeandel and S. Wiltshire. Solicitors: H. Rumney, 6 John Street, Adelphi, W.C.2.

**CAVENDISH TRADING Co. (CHEMICALS), LTD. (P.C.).**—Capital £1,000 in 800 ordinary and 200 employees' shares of £1 each. Objects: To adopt an agreement between A. W. Foster and J. E. D. Kenrick, and to carry on the business of chemists, druggists, drysalts, oil and colourmen, etc. The directors are: A. W. Foster and Edith F. Newsham. R.O.: 16 South Castle Street, Liverpool.

**CONTINENTAL TINTEX AND DYE PRODUCTS, LTD. (Public Company).**—Capital £200,000. Objects: To adopt agreements (a) with Park & Tilford, Ltd., and (b) with British Tintex and Dye Products, Ltd., and to carry on the business of manufacturers, producers, importers, exporters, merchants and brokers of dyes, dyestuffs, chemicals, drugs, varnishes, colours, etc. The directors are: Alfred Dunhill, David A. Schulte, Vernon Dunhill and Ernest J. Allistone. R.O.: 56 Moorgate, E.C.2.

**PASTEX DYES, LTD.**—At a meeting held in London on February 13 it was resolved that this company be wound up voluntarily. Mr. M. C. Spencer, 3 Fredericks Place, Old Jewry, E.C., was appointed liquidator, and a meeting of creditors will be held at the above address on February 28.

**BOVRIL, LTD.**—The net profit for 1928 amounted to £366,898 (against £360,524 for 1927), and the balance from last account was £78,610. The directors propose to pay a dividend of 8 per cent. for the second six months, making 13 per cent. for the year, on the deferred shares, to place to reserve £60,000 (against £64,507), and to carry forward £71,135. For the preceding year the dividend on the deferred shares was the same.

**FAIRY DYES, LTD.**—The profits are in excess of the average shown in the prospectus, being £10,037, and the dividend on the ordinary shares is at the rate of 12½ per cent. per annum. Mr. F. Shoesmith, chairman and managing director, presiding at the first general meeting of shareholders, said that £2,608 would be carried forward to next year's account. That represented 25 per cent. of their profits, and the directors felt they were following a prudent course in starting the foundation of a reserve fund to meet any future emergency. Sales were increasing month by month. Their export trade, though comparatively in its infancy, was very healthy, and they were entitled to look for considerable expansion in this direction.



## Festivities

### Cardiff Association's Function

THE annual whist drive and dance of the Cardiff Pharmacists' Association took place on February 6 at the Royal Hotel. The president (Mr. J. D. Jenkins) and Mrs. Jenkins welcomed the 150 guests prior to the function. Mr. James Murray acted as M.C. for the cards, while Mr. S. W. Hague undertook the charge of the dance hall. A feature of the dancing was an exhibition of a variety of up-to-date dances. The winners at whist were:—*Ladies*: (1) Mrs. Thomas; (2) Mrs. Rogers; "secret number" prize, Mrs. Shelton. *Gentlemen*: (1) Mr. E. G. Howell; (2) Mr. Rogers. For the dancing competition the waltz prize was secured by Mr. and Mrs. Herbert, while the partner prize representing mortar and pestle was awarded to Miss Loyley and Mr. Godfrey. Thanks were accorded to Mr. E. G. T. Loyley (managing director of the Cardiff branch of Messrs. Newbery) for his kindness in offering four of the prizes.

### Blackpool Annual Dinner

THE annual dinner of the Blackpool Branch of the Pharmaceutical Society was held at the Palatine Hotel on February 13. Mr. J. Holdsworth presided. Among the guests were the Mayor, Mr. W. Bateson (secretary to the Insurance Committee), Mr. E. R. Green (president of the Chamber of Trade), Mr. E. H. Simmons (member of the Society's Council), Drs. H. T. Barton and J. McL. Baird, and Mr. J. W. Bellarby. Mr. S. C. Coope proposed the toast of "The Pharmaceutical Society," and complimented the local members on the use of the word "chemist" in place of the word "pharmacist." Mr. E. H. Simmons, responding, referred to the Dangerous Drugs Act, and said that it was an international question, in which England was being dragged at the tails of America and the European nations. Mr. J. F. Blackhurst submitted "The County Borough of Blackpool." The Mayor replied. Mr. E. R. Green (president of the Chamber of Trade) also responded to the toast. Mr. J. W. Huddart, proposing the toast of "The Medical Profession," expressed the appreciation of the local members of the Society at the efforts of the medical men, and at the amicable relations existing between the medical and pharmaceutical professions in Blackpool. Dr. Barton, who responded, spoke of changes in the two professions, and said it was gratifying to find that there were such good relationships existing between the doctors and the chemists.

### Glasgow Pharmacy Club Dinner

THE annual dinner of the Glasgow Pharmacy Club was held in the Grand Hotel on February 12. Mr. J. Abbott, president, occupied the chair, and was supported by Mr. and Mrs. T. Guthrie, Mr. A. A. Dick and Miss Dick, Mr. and Mrs. G. Mackay, Mr. H. P. Arthur and Miss Arthur. There was a large and representative attendance. The chairman, in a felicitous speech, proposed the toast of "The Pharmaceutical Society of Great Britain and the Scottish Pharmaceutical Federation." Referring to the work of the Society, he said the Council were often blamed for doing things, and he questioned whether they, as members, were not as much responsible as the Council for any mistakes that might occur. He made a strong appeal on behalf of the Benevolent Fund. Regarding the Federation, he thought that such a body was necessary to protect the trading interests of chemists and druggists. In replying to the toast of the Society, Mr. Guthrie (treasurer) hoped that in any legislation that might follow on the report of the Inter-Departmental Committee, the Council would have the support of every man and woman on the register. Mr. Dick responded on behalf of the Federation, saying that the Federation was rapidly increasing in numbers and going from strength to strength. He promised the support of the Federation to the Pharmaceutical Society in any endeavour that might be necessary to conserve the legitimate rights of pharmacy. The toast of "The Pharmacy Club" was submitted by Mr. R. T. Spargo, and responded to by the chairman. Mr. R. Dickson proposed "The Donors of the Various Trophies," to which Mr. G. Mackay, representing W. & R. Hatrick & Co., replied. The toast of "The Ladies"

was proposed in a witty manner by Mr. D. G. Mackenzie, who delivered an up-to-date and original poem. Miss Bain, in a happy little speech, responded, and recommended that the wives of delegates to the Conferences should accompany and look after their husbands. An interesting programme of song and story was sustained by Miss H. R. Laidlaw, Mr. D. Clark, Mr. G. Hutchison and Mr. W. Hudson, with Miss M. Ritchie as accompanist. On the motion of Mr. D. Black, these artists were awarded a hearty vote of thanks. The prizes for the various sections of the club were presented to the winners by Mrs. Abbott, the wife of the president. The following were the successful competitors:—*Ladies' golf section*: Hunter trophy, Miss M. C. M. McAllister; Guest cup, Miss M. McD. Bain. *Gentlemen's golf section*: Rainy Brown inter-city trophy, Mr. David Duncan; Mackay cup, Mr. A. Scott; Smith cup, Mr. T. McKinstery; Hatrick trophy, Messrs. McKinstery and Aitken; Virol cup, Mr. T. McKinstery. *Bowling section*: Greig trophy, Mr. W. J. Moffat; Cartwright trophy, Messrs. F. Gray, W. Seivwright, A. Calder and W. J. Moffat (skip); Cockburn cup, Mr. J. W. Logan; special second prize, Mr. A. W. Calder. *Angling section*: Beaumont trophy, Mr. J. B. McVitie; McEwan quaiach, Mr. Gordon Baird. A Benevolent Fund collection amounted to £7 6s.

### West Ham Dinner

THE West Ham and District Association of Pharmacists held their annual dinner and dance at the Holborn Restaurant on February 14. Mr. W. J. Beardsley (president) in the chair. This social function again proved very popular, all available tickets being allotted a week before the event. Among those present were: The president of the Pharmaceutical Society (Mr. Herbert Skinner), the chairman of the British Pharmaceutical Conference (Mr. R. R. Bennett) and Mrs. Bennett, Mr. W. Bennett, the new pharmacist M.P., Mr. A. R. Melhuish and Mrs. Freke (members of Council), Mr. and Mrs. Mackie (Brighton), Dr. Florence Barnett (headmistress, West Ham High School), Dr. T. C. Baillie (principal, West Ham Municipal College), Mr. Donald Harding (vice-chairman, West Ham Insurance Committee), Mr. C. A. Clark (clerk to the Insurance Committee), Mr. and Mrs. Tucker, Mr. and Mrs. T. Morley Taylor, Mr. and Mrs. G. W. Evans, and Mr. and Mrs. J. T. Walters. The spur tables were in charge of Messrs. J. Thomson, F. W. Gwinn, S. C. Jones, L. A. E. Kirkpatrick, C. B. Pratt, F. R. Maxey, B. Wathen, H. S. Aplin and J. Reed. The toast of "The Pharmaceutical Society of Great Britain" was proposed (in the absence of Mr. Tom Groves, M.P.) by Mr. W. Bennett, M.P. "All my life," he said, "it has been my greatest pride that I have been a pharmacist, and I hope it always will be so." He considered the success of the Society in future depended on their working together. They owed a great deal to the fact that Parliament gave to their Society certain privileges. In the past they had known hard times, but things had altered tremendously, and this was all to the good of everyone concerned. Mr. Skinner, replying, congratulated Mr. Bennett on being the first pharmacist to enter this Parliament. At the next election more pharmacists were standing, and if they did as well as Mr. Bennett, the Society would be proud of them. When their case came up for discussion in the House of Commons, he hoped that it would at least be discussed with intelligence. "The Ladies" was given by Mr. R. R. Bennett and responded to by Dr. Florence E. Barnett. "The West Ham and District Association of Pharmacists" was proposed (in the absence of Mr. E. T. Neathercoat) by Mr. A. R. Melhuish, who said that all those who were associated with pharmacy must appreciate the work that the West Ham Association had done. That night was the twenty-sixth anniversary of the West Ham Association. Mr. Beardsley, responding, said that the West Ham Association had never been in the background so far as pharmacy was concerned. Their secretary, Mr. Reed, had done wonderful work for them during the past year. He had much pleasure in giving the health of the secretary. Mr. Reed suitably replied. The speeches were interspersed with vocal items. The banqueting hall being cleared, dancing was enjoyed for the rest of the evening.



## Pharmaceutical Society of Ireland

### Council Meeting

THE monthly meeting of the Council of the Pharmaceutical Society of Ireland was held at 67 Lower Mount Street, Dublin, on February 12, Mr. F. J. Fitzpatrick (president) in the chair. The following members of the Council were also present:—Mr. Denis J. Nugent (vice-president), Dr. J. A. Walsh, Dr. J. A. Mitchell, Sir Thomas Robinson, Messrs. James McCormack, P. Kieran, Thomas J. Doyle, John J. Roche, Patrick Brooke Kelly, W. Gannon, M. J. Kieran, J. J. R. Kerr, P. J. Fielding, P. D. Larkin and P. A. Brady. Dr. Ryan (hon. treasurer) and Mr. Liston sent apologies for non-attendance.

The registrar (Miss E. C. Grene) submitted a letter from Mrs. Allen, widow of the late Mr. William Nassau Allen, Ph.C. Mrs. Allen wrote:—"My daughter and I most sincerely thank the Pharmaceutical Society for their resolution of sympathy in our great loss and grief, and you personally for uniting with them in it."

### THE STROKESTOWN CASE

The registrar submitted a letter from the Secretary to the Minister for Justice, stating that, in the matter of Miss Teresa MacDermott, who was convicted at the Stokestown District Court on November 8, 1928, of breaches of the Pharmacy Act, 1875, etc., on a full consideration of all the circumstances of the case, the Minister had decided that he could not advise the Governor-General to mitigate the penalties imposed, and that, accordingly, the law must take its course.

### CHANGE OF NAME

The registrar submitted the marriage certificate of Mrs. Mulligan, Ph.C. (*née* Clare O'Kelly), who desired that her name should be altered in the Register.

### CHANGES OF ADDRESS

The following notified changes of address:—

Mr. J. J. Dalton, M.P.S.I., to Caltra, Ballinasloe, Co. Galway; Mr. Wm. Keogh, M.P.S.I., to The Pharmacy, 1a Avonmore Terrace, Terenure; Mr. John O'Sullivan, M.P.S.I., to c/o Kerin's Medical Hall, Millstreet, Co. Cork; Mr. J. L. Parkinson, R.D., to Lisadell, Cregagh Road, Belfast; Mr. John Sheehy, M.P.S.I., to Howard's Medical Hall, Kanturk, co. Cork; and Miss K. Deery, M.P.S.I., to The Pharmacy, 157 Harold's Cross Road, Dublin.

### PRELIMINARY REGISTRATION

The following, who submitted certificates from other bodies, were admitted to Preliminary registration:—Mr. Anthony Cassells, 32 Maw Street, Longford; Mr. Augustine Aloysius Hayes, Muinntir Aodha, 16 Hume Street, Dublin.

### REPORTS FROM COMMITTEES

Reports from the Law Committee, the House Committee and the Benevolent Fund Committee were received and adopted. A subscription of £2 2s. to the Benevolent Fund was received from Mr. W. K. Bourke, Ph.C., Roscrea.

### REPORT OF DEATH

The registrar reported the death of the Rev. J. Irwin, Ph.C., Dungannon.

### REPORTS FROM EXAMINERS

The reporter submitted reports from the examiners, from which it appeared that eleven candidates presented themselves for the Preliminary examination, of whom five passed; that for the Pharmaceutical Licence examination there were twenty candidates, of whom one passed; that for the Pharmaceutical Assistants' examination there eight candidates, of whom five passed; and that twelve candidates presented themselves for the Registered Druggist examination, of whom six passed.

### RE-ELECTION OF EXAMINER

On the motion of the VICE-PRESIDENT, seconded by Mr. FIELDING, Mr. Malachy Joseph O'Callaghan was re-elected as pharmacy examiner.

### SEALING OF PHARMACEUTICAL LICENCE

On the motion of Dr. WALSH, seconded by Dr. MITCHELL, the pharmaceutical licence of Mr. Herbert Coburn was directed to be sealed.

### DUBLIN CITY COMMISSIONERS THANKED

The VICE-PRESIDENT proposed: "That the best thanks of the Council be sent to the City Commissioners for their kindness in giving the use of the Mansion House for the British Pharmaceutical Conference."

### ELECTIONS AND NOMINATIONS

The following were elected to membership:—Mr. C. Cremen, Ph.C., 3 Meath Street, Dublin; Mr. Owen McCormick, Ph.C., Milford, co. Donegal; and Miss Ethel M. O'Neill, Bailieborough, co. Cavan.

Mr. James A. Doyle, Ph.C., Henry Street, Kilrush, co. Clare, was nominated for membership, as was also Mr. J. O'Sullivan, Ph.C., Newcastle West.

## Indian Shellac

A BULLETIN issued by the Bengal Department of Industries with regard to shellac (dealt with in the "Times" Trade Supplement) draws attention to the antiquated and wasteful methods in vogue, and recalls the disappearance of the Indian indigo industry owing to analogous defects. It expresses the view that the same kind of threat lies at the door of the lac industry. "True," the Director of Industries says, "a complete substitute for shellac has so far not been produced, but as a varnish it is being displaced rapidly in many directions by the cellulose products of the modern chemist. The existing industry can only retain its present strong position (says the bulletin) by improving the quality and cheapening the cost and the preparation for export under standardised conditions."

The chief difficulty hindering reform, and one which can be offset only by patient and prolonged propaganda, is that the common lac producer in Bengal is the ordinary ill-educated and conservative villager who has a few lac-bearing trees, usually the "Kool" tree, round his homestead land. He seldom takes to the cultivation of lac as seriously as he takes to the production of a staple crop like paddy or jute. The lac crop is not infrequently left to take care of itself, and it is only in years of very high prices that the cultivator pays any attention to it, and then only to the extent of guarding the mature crop from theft.

"There are, however, the big jotedars and other comparatively well-off people, who have large numbers of lac-bearing trees growing on their lands. The raising of lac from such trees is sometimes done by the landholders themselves, and at other times it is entrusted to the agents of big lac dealers on what is known as the 'adhi' system, in which the dealer's man is allowed a share of the crop, usually half, in return for his doing everything necessary for the raising of the crop and bearing all expenses relating thereto. There are very few instances in Bengal of regular plantations of lac-bearing trees and of cultivation of lac on up-to-date and scientific lines. It is, however, gratifying to note that as a result of the co-operation of the Government departments concerned with the enterprising lac growers, people generally are gradually coming to know of the value of lac cultivation on improved methods."

It is further pointed out that the refined lac now produced is replacing the Indian shellac in the European and American markets. Even stick lac, with a guaranteed percentage of sticks, is being bought in the Indian market by foreign buyers. The "kiri" and other residues in the melting of lac are also bought by overseas buyers, and the lac is recovered from these advantageously.

EXPORT OF GREEK OLIVE OIL.—The Greek "Official Gazette" (September 7) contains a Decree, effective from September 1, which abolishes the export tax of 2 per cent. of the market price formerly leviable on olive oil (other than perfectly clear refined olive oil with an acidity not exceeding 1 per cent.) exported from Greece.



## Narcotics in South Africa

### NEW GOVERNMENT REGULATIONS

REGULATIONS regarding the importation, sale and use of opium and other habit-forming drugs, made by the Minister of Public Health, are published in the Union of South Africa Government "Gazette" of January 4, 1929. The regulations have been made by the Minister of Public Health under the powers vested in him by Section 72 of the Medical, Dental and Pharmacy Act, No. 13, of 1923, and after consultation with the South African Medical Council and the South African Pharmacy Board. The regulations include the Mandated Territory of South-West Africa in their operation.

No habit-forming drug may be transhipped at any port or place in the Union without the necessary permit. The ports of entry prescribed are Cape Town, Mossel Bay, Port Elizabeth, East London, Durban, Johannesburg, Bloemfontein, Kimberley, Maritzburg, Pretoria, Germiston, Walvis Bay and Luderitz.

No habit-forming drug shall be conveyed into the Union by letter post, and no person shall dispatch or transmit any such drug in the Union by letter post. Where any such drug is conveyed into or within the Union by post it shall be sent or conveyed by parcel post.

The Secretary for Public Health may, on application made to him with full particulars, issue a permit authorising the importation, purchase, acquisition, keeping or use of any habit-forming drug for scientific or educational purposes, or the collection, cultivation or keeping for such purposes of any plant from which any such drug may be extracted, derived, produced or manufactured. The issue of every such permit shall be subject to such special conditions or requirements as may be stated thereon.

Regulations for the treatment of livestock by farmers and others are also set out at length. No quantity exceeding ten ounces may be obtained at any time.

Every permit issued by the Secretary for Public Health shall be subject to half a dozen other requirements, including the following:—"The container, in addition to any other label required by law, shall be labelled 'For animal treatment only—Alleen voor behandeling van diere,' and, if in the Mandated Territory of South-West Africa, 'Nur fuer Tierbehandlung,' shall be kept under lock and key by the owner, or some responsible person acting on his behalf, and the contents shall be used only for administration to animals."

In addition, regulations for obtaining cocaine solution for use in factories and workshops are provided. A written application to the Secretary for Public Health is necessary before a supply may be obtained from the chemist and druggist.

Any habit-forming drug, or any pipes, receptacles or appliances for smoking or using the same found in the possession of any person not entitled under the Act to keep or use the same may be seized and disposed of. Any person required under the Act to keep a register of habit-forming drugs who fails on demand to produce it for inspection by any person duly authorised shall be guilty of an offence, and liable, on conviction, to the penalties provided in the Act.

These regulations will not apply to any habit-forming drugs landed at any port of the Union for conveyance direct to any place beyond the Union.

### LIST OF EXEMPTED PREPARATIONS

Section 8 of the regulations exempts from the regulations, and from all provisions of Chapter VI of the Act, the following substances or preparations containing habit-forming drugs specified in Annex A, which reads:—

Cereoli iodoformi et morphinae B.P.C.  
Codeine and its salts.  
Emplastrum opii B.P. 1898.  
Linimentum opii B.P.  
Linimentum opii ammoniatum B.P.C.  
Pasta arsenicalis B.P.C.  
Pilulae hydrargyri cum opio B.P.C.  
Pilulae ipecacuanhae cum scilla B.P.  
Pilulae plumbi cum opio B.P.  
Pilulae digitalis et opii compositae B.P.C.  
Pilulae hydrargyri cum creta et opio B.P.C.

Pulvis cretae aromat. cum opio B.P.  
Pulvis ipecacuanhae co. B.P.  
Pulvis kino comp. B.P.  
Suppositoria plumbi composita B.P.  
Tablettae plumbi cum opio B.P.C.  
Unguentum gallae cum opio B.P.  
Unguentum gallae comp. B.P.C.

Eyedrops required for inclusion in first-aid outfits under the Factories Act, No. 28, of 1918, consisting of a solution of 1 in 3,000 perchloride of mercury in castor oil with 0.5 per cent. of cocaine.

The Minister of Public Health has also gazetted regulations made by him regarding the keeping, sale or supply of poisons and preparations containing poisons.

The third section of the regulations deals with the sale of poison by general dealers and co-operative agricultural societies.

The fourth section deals with the sale by general dealers of patent, proprietary or "Dutch" medicines containing poison.

The sale of poisons in bulk is dealt with by the following regulation:—

7. For the purposes of Section 53 of the Act the sale of a poison or preparation containing poison in unbroken original containers as supplied by the manufacturer or wholesale distributor, and in quantity such as would ordinarily be dealt with in the course of wholesale dealing, and in any case not less than one pound weight, shall be deemed to be a sale of the poison or preparation in bulk.

## British Trade in Essential Oils

BRITISH exports are only approximately one-tenth the imports, although the proportion of oils re-exported is large. The following table gives comparative figures for British imports and exports and re-exports and natural essential oils during 1925 and 1927, showing the countries of origin and destination:—

Country	Imports		Re-exports		Exports	
	1925	1927	1925	1927	1925	1927
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
France ..	381,226	293,595	110,289	88,271	43,952	26,585
Germany ..	93,216	117,263	208,038	198,685	23,196	55,116
Italy ..	580,389	552,371	—	—	3,876	1,957
Netherlands ..	42,733	64,442	103,008	85,603	17,105	18,821
Soviet Russia in Europe ..	—	—	95,370	3,660	1,739	—
Spain ..	232,632	252,314	10,901	27,276	9,700	10,850
Switzerland ..	—	—	9,105	5,703	43,378	31,817
Canada ..	—	—	46,388	32,988	41,875	16,944
British West Indies ..	74,570	44,960	—	—	—	—
British India ..	241,340	234,688	26,499	29,641	24,185	34,939
Ceylon ..	447,175	311,942	—	—	—	—
China ..	118,478	40,094	6,113	5,706	3,681	1,525
Java and Madura ..	331,525	700,579	—	—	—	—
Hong Kong ..	103,883	166,415	23,806	15,395	2,822	3,012
Japan, including Chosen ..	362,209	290,110	53,733	59,943	11,318	20,005
Australia ..	466,949	315,000	56,191	66,173	48,645	33,770
British Africa ..	—	—	21,438	25,264	13,822	53,006
Algeria ..	—	—	—	—	—	—
Tunisia ..	11,527	10,223	—	—	—	—
Reunion ..	27,562	14,432	—	—	—	—
Other foreign countries ..	102,155	157,805	37,924	73,540	39,285	67,533
United States ..	216,573	396,905	159,702	51,640	44,657	31,424
Other British countries ..	45,408	34,497	45,702	61,081	12,098	24,334
Total ..	3,879,550	3,997,635	1,014,207	830,569	385,334	431,638



## Pharmaceutical Society of Northern Ireland

### Council Meeting

THE monthly meeting of the Council of the Pharmaceutical Society of Northern Ireland was held on February 15, the president (Mr. W. J. Hardy) in the chair. There were present also:—Messrs. Fred Storey (vice-president), James Dundee, H. Lancashire, W. E. Wilson, S. S. Badger, H. Todd, J. F. Grimes, H. McRoberts, J. E. Connor, Professor Small and Dr. Acheson. Mr. D. L. Kirkpatrick (secretary of the Society) was in attendance.

### CORRESPONDENCE

Greetings were received from the Pharmacy Council of Western Australia.

Miss McFarland wrote resigning membership of the Society on the occasion of her marriage.

A letter was received from Mrs. Hamill, widow of the late solicitor to the Society, thanking the Council for their sympathy on the death of her husband.

Mr. Herbert Skinner, president of the Pharmaceutical Society of Great Britain, wrote thanking the Council for having elected him an honorary member of the Society, and stating that it was something which not only he personally appreciated, but which would, he knew, be appreciated by the members of the Pharmaceutical Society of Great Britain.

Mr. L. Moreton Parry, Liverpool, also wrote thanking the Council and stating that it would always be a pleasure to remember that he was one of the first honorary members of the Society, and that fact, associated with the happy recollections of the Society's deputation's visit to London, would always remain a pleasant memory, and at some future date he might have the further pleasure of visiting Belfast.

### THE GRANTING OF POISON LICENCES

THE SECRETARY reported that applications for leave to sell sheep dip had been granted by the County Council to traders in Antrim and Cumlin other than pharmaceutical chemists and druggists. The Law Committee had objected, but in spite of that the applications were granted. In this connection complaint was made that the Home Office had taken no action after the hearing of the recent appeals, although the officials of the Department had reported in favour of the contention of the Society in all the cases then heard with one exception.

MR. CONNOR said there was a feeling among the pharmaceutical chemists that they should take every step to prevent those licences being granted.

MR. STOREY said that in Antrim there were two chemists and a druggist. He thought the Home Office should be written to expressing surprise at the granting of the licences after the proceedings at the recent inquiry.

MR. LANCASHIRE thought the Act was being stultified by the granting of those licences.

THE PRESIDENT thought they should inform the Minister of Home Affairs that they considered an injustice had been done.

It was decided to send a letter to the Home Office on the subject, expressing surprise that the licences had been granted.

### SALE OF DISINFECTANTS

The Law Committee reported having discussed the sale of disinfectants in ordinary bottles, and decided that the matter be left to the Home Office to deal with the case that had been reported.

THE SECRETARY intimated that the Home Office said they could do nothing if the disinfectant contained under 3 per cent. of carbolic acid.

Several members alleged that disinfectant under 3 per cent. was being made in the city.

DR. ACHESON said that the Public Health Department was not selling the disinfectant.

THE SECRETARY said that even some chemists were selling disinfectant in lemonade bottles.

The matter was left in the hands of the secretary to ascertain the strength of the disinfectant supplied by the

Corporation, and the report of the Committee was adopted.

### EDUCATION COMMITTEE

The Education Committee minutes of January 31 stated that the following, who submitted certificates from the undermentioned bodies, were granted the preliminary certificate of apprentice to pharmaceutical chemist:—Fergus McFall, c/o G. N. Calvert, Ballyclare (Junior Grade certificate, 1924); John Staples Aitken, Millmount, Enniskillen (Senior Grade certificate, 1928).

A letter was received from Mr. J. W. Mansfield, principal of the Technical School, Enniskillen, asking for a grant to equip the physics laboratory. A proposal to grant £8 was carried by a majority, an amendment for £5 being defeated.

The following letter was received from Mr. Alfred Miller, secretary of the Royal College of Physicians and Surgeons (Ireland):—"With reference to your letter of 19th inst., I shall be only too happy to facilitate your students in any way I possibly can. They can, of course, take five subjects."

The Committee's minutes of February 15 showed that the principal of Omagh Technical School had written stating that the Ministry had not officially refused to approve of the appointment of Mr. Herbert Kyle, M.P.S.N.I., as teacher of botany, but that the question had been under consideration by the local Education authority. One of the Ministry's inspectors had told him that the Ministry would refuse to sanction Mr. Kyle if he were appointed, that a degree in the subject would be necessary before the Ministry would ratify the appointment, and that it would be useless asking them to do so. The Committee decided that a deputation be sent to the Ministry to ask for approval to the appointment of Mr. Kyle. The minutes of both dates were adopted.

It was decided to affiliate with the proposed Ulster Natural History and Philosophical Society, and the thanks of the Council were tendered to Professor Small for his interest in the matter.

### MEMBERS ELECTED

The following nominated candidates were elected members of the Society:—B. Murphy, c/o Cofman's Pharmacy, 41 Hart Street, London, W.C.1; Edmond Maguire, 137 North End Road, Golders Green, London, N.W.11; William Charles Gailey Hamilton, 2 Rugby Parade, Belfast; Michael Leo McCormick, 29 Francis Street, Londonderry; Armar John Donnell, 7, Canterbury Street, Belfast; James Porter Hutchison, 7 Brownlow Terrace, Lurgan; Cecil Leonard James Taylor, The Medical Hall, Enniskillen.

Accounts were passed and the Council rose.

## Retail Pharmacists' Union

**Cardiff.**—The annual meeting of the local branch was held recently, when officers were elected as follows:—*Chairman*, Mr. A. S. Johnson; *Vice-Chairman*, Mr. S. B. Eason; *Treasurer*, Mr. J. D. Jenkins; *Secretary*, Mr. A. J. Harris; *Committee*, Messrs. Jabez A. Jones, J. Lee Jones, J. Murray, E. A. Ward, A. T. Mogg, J. T. Day and G. Jenkins. The annual report was presented and adopted. A vote of sympathy was passed with the widow and relatives of the late Mr. David Davies.

**Devon.**—A meeting of the Retail Pharmacists' Union (Devon Branch) was held at Exeter on February 15. Mr. G. A. Clarke presiding. Mr. H. W. Harrie, speaking on *The Chemists' Sickness and Provident Society*, explained fully the objects and possibilities of the Society. The Society should appeal particularly to the younger men. Being reserved to those in a very healthy calling, the apportionment of the annual surplus which was credited to each member (in proportion to shares held by him, but independently of any sickness benefit received) should be relatively high. Its financial stability was secure, since the funds were invested in trustee stock, the management expenses were limited by law to 10 per cent. of the subscriptions received, and the accounts were subject to audit.



## Pharmaceutical Society of Great Britain

### Glyn-Jones Memorial Fund

We have received from the Pharmaceutical Society a seventh list of subscribers to the Glyn-Jones Memorial Fund, comprising the following contributions:—Four of £5 5s., one of £5, one of £3 3s., one of £2 2s. 6d., eight of £2 2s., one of £1 11s. 6d., seventy-five of £1 1s., five of £1, one of 13s., fifty-five of 10s. 6d., sixteen of 10s., one of 9s. 3d., one of 8s. 5d., twenty of 5s., two of 3s. 6d., three of 2s. 6d. These sums amount to £177 10s. 9d., making, with previous lists, a total of £3,612 3s. 1d.

### Branch Meetings

**Ayr.**—A district meeting of the Glasgow and South-Western Scottish Branch of the Pharmaceutical Society was held in Ayr on January 30. Mr. H. P. Arthur, chairman of the Branch, presided. The chairman introduced Mr. H. N. Linstead (secretary and registrar), who in the course of his address dealt principally with the position which was likely to arise as a result of the publication of the report of the Inter-Departmental Committee. He dealt particularly with such matters as the means of securing removal from the register for pharmaceutical offences, the machinery for amending the Schedule of Poisons and for making regulations for the keeping, dispensing and selling of poisons, the annual registration of chemists and their shops. He made a strong appeal for the Benevolent Fund, and gave some particulars of the work of the Parliamentary Fund Committee. The following members took part in the discussion:—Messrs. Nicolson, M. Meldrum, J. D. MacLeod, T. Ness, T. Guthrie and David Gemmell. Mr. Linstead replied to the various points raised and questions asked, and was accorded a vote of thanks on the call of Mr. W. Spence Culbert. Dr. Tait thanked the Branch for the invitation he had received to the meeting. The chairman made an appeal on behalf of the Sir William Glyn-Jones Memorial Fund.

**Bradford.**—Mr. A. H. Jenkin, member of the Council of the Society, addressed a meeting of the Bradford Branch on February 14. Mr. J. A. White presided. Mr. Jenkin presented a copy of the B.P. Codex (the gift of the Council of the Pharmaceutical Society) to Mr. W. N. Moore, the student gaining the highest aggregate marks at the pharmacy department of the Bradford Technical College last session; and prizes given by the Bradford Branch for the two best results in the day and evening courses at the College were handed to Messrs. Burns, Appleyard, Sugden and Jackson. Mr. Jenkin addressed the meeting on *Some of the Council's Problems*. He said the Council was open to a good deal of undeserved criticism because so much of its work had to be relegated to committees and—for reasons of the welfare of the craft in the face of powerful enemies—could not be broadcast to the extent which critics not conversant with all the facts sometimes thought desirable. During the present month the membership of the Society had reached 14,000. The Council might almost have been chosen on a basis of territorial representation. Mr. Jenkin contended that the development of modern business in the average retail pharmacy had created a situation under which it was with the utmost difficulty that the apprentice could receive a really thorough training in practical pharmacy. The Society had not yet found a completely satisfactory solution. Speaking of the outcome of the sittings of the Inter-departmental Committee, Mr. Jenkin said he did not think it likely that the position would be left untouched. If and when any such alterations were proposed, they would have to go through Parliament, and it was imperative that by that time pharmacy should have its own experienced men in Parliament to present the case for the chemists. There were several members of the craft likely to stand as candidates in the coming general election, including three members of the Pharmaceutical Council (Messrs. Rowsell, Hines and Hardy). Speaking of the future of headquarters of the Pharma-

ceutical Society, Mr. Jenkin said the work was now of such dimensions that housing was becoming a serious problem, and members would have to consider, as the end of the present lease in Bloomsbury Square approached, whether they were going to renew their occupancy in a place which could never be their own freehold, or seek a freehold site elsewhere and erect a new headquarters. That, of course, would be a very costly undertaking. Mr. Jenkin said he never appealed for the funds, because he regarded support of them as a duty of every qualified chemist, particularly so with the general Benevolent Fund. The War Auxiliary Fund had given great benefit in the way of help to returned ex-Service men to start business, help to dependants of men lost in the war, and education of their children. The commitments of this fund were likely to extend over a generation, and it might be that a further appeal may have to be made in eight or ten years. Mr. Jenkin concluded with references to the organising work of the Society. A discussion followed. Mr. F. E. Burdett said the Society was to be congratulated on having reached 14,000 members, and the time had arrived for compulsory membership. Mr. Burdett's view of the Parliamentary Fund was that there was a good deal of anxiety on the part of the rank and file as to whether it would be wisely spent or wasted on forlorn hopes. As to the Society's headquarters, no sentimental regard for Bloomsbury Square should stand in the way of a permanent and fully worthy pharmacy home, even if it did involve a big expense. Mr. R. T. Silson said he was surprised to hear it suggested that conditions in the wholesale trade were so delightful that once the retail apprentices got there, very few of them would return to the retail. Every possible encouragement should be given to wholesale firms to invite parties of students from the schools to visit their laboratories and see the making of medicaments. Mr. F. W. Appleyard expressed the view that a way would have to be found to introduce more practical pharmacy in the schools, because the whole trend of business in the modern retail pharmacy raised almost insuperable difficulties for the student to get the practice there. Mr. Appleyard's view of the Parliamentary Fund of the Society was that it was likely to be wasted money, even if they did get chemists into Parliament. A student-associate from the Technical College said he thought there were subjects in the curriculum which could well be cut out and their place taken by more practical pharmacy. The mechanics side of physics, for instance, was not likely to be of much value to a retail pharmacist. Mr. Craven thought the time had come when the Pharmaceutical Society should set itself out to secure "pharmacy for the pharmacist," instead of all kinds of traders being in a position to sell and handle medicines which were really the right of the chemist. Mr. W. Sutcliffe thought it must be recognised that pharmacy was getting overcrowded with apprentices, and the country was being flooded steadily with qualified people for whom the craft did not hold sufficient places. Mr. D. L. Carter, secretary of the Bradford Branch, thought the apprenticeship period should never have been reduced to three years. He felt that in five years in the retail pharmacy the average apprentice could learn sufficient practical pharmacy without any necessity to call for alteration in the schools curriculum. Mr. Carter thought organic chemistry was a waste of time in Part II training. Mr. Jenkin replied.

**Dumfries.**—A district meeting of the Glasgow and South-Western Scottish Branch of the Pharmaceutical Society was held on January 31, Mr. H. P. Arthur in the chair. Mr. H. N. Linstead, in the course of his address, dealt with a number of the Society's activities and with the figures in the registrar's annual report. Among the points dealt with were life membership, examination results, the inflow of apprentices, apprenticeship in wholesale houses, supervision of apprentices, increase in number of limited companies, inspection of shops, parliamentary representation, the Benevolent Fund and the Dangerous Drugs Regulations. In the discussion which followed the following members took part:—Messrs. Campbell, Laidlaw, Walker, McKearlie, Shennan, J. Walker, Henderson, Turner and Fraser. Mr. Linstead replied to the various questions raised. Mr. Turner proposed a vote of thanks to the speaker.



**East Metropolitan.**—A meeting of the East Metropolitan Branch was held on January 31, Mr. H. F. Hodgson (vice-president) in the chair. An address was given by Mr. E. Saville Peck on *The Technical Training of the Apprentice in Retail Pharmacy*. Mr. Peck outlined the regulations for taking apprentices, with particular reference to what the master undertook, under seal, to instruct. The apprentice should have passed a suitable preliminary examination. He considered matriculation or its equivalent suitable, as it gave the pupil a sound foundation to build upon. What were the essential points of the agreement? Were they being carried out to-day? Was the equipment of pharmacies suitable for this tuition? Had the time arrived when some supervision was necessary? There was a low standard of passes at the present time, and it appeared as if the general standard had not improved. The technical training was not satisfactory, owing perhaps to the increasing number of standardised preparations, the difficulties attending the rebate on spirit, the economic aspect, the altering style of work done, the actual working conditions, the lay-out of the dispensing bench and often lack of equipment. Probably in the future it might be necessary to institute greater supervision of apprenticeship and the training carried on. It might be possible to institute a voluntary panel of pharmacists willing to train apprentices, and those eligible to do so might be decided by the Society on the advice of the branches. The subject was one which bristled with difficulties. Mr. J. Reed (West Ham) wanted to know what was to become of the unregistered apprentice or assistant who could not qualify. Mr. J. Haylock (president of the junior section) thought the apprentice could teach himself to a great extent. Mr. Cooper, Mr. Hodgson and others took part in the discussion. Mr. Peck replied to the points raised, agreed that an intelligent interest taken by the apprentice was a great advantage, and advocated the collection of materia medica specimens and an herbarium, advising the juniors to enter for the Society's herbarium prize. A vote of thanks was proposed by Mr. J. Reed.

## Associations' Winter Session

**Blackburn.**—The annual meeting of the Blackburn and District Chemists' Association was held on February 13. Mr. Arthur Lucas in the chair. Mr. Fred Law, secretary, in the annual report, stated that there had been no matter necessitating special action, but much useful work had been accomplished in a quiet way. The chairman, in his presidential address, thanked the officials and members for their loyal co-operation, and appealed for greater interest in the work of the Association. The following officers were elected for the ensuing year:—*President*, Mr. Arthur Lucas; *Vice-President*, Mr. J. Eyles; *Treasurer*, Mr. W. H. Lightbown; *Secretary*, Mr. Fred Law; *Committee*, Mrs. Hargreaves, Mr. A. Dobson, Mr. H. Flintoff, Mr. T. Haslam, Mr. A. W. Walton, and Mr. W. Holt. There was a discussion on the question of changing the long shopping night of the week from Saturday to Friday, and a diversity of opinion was expressed regarding the petition of the Grocers' Association to change the night. The majority were opposed to the change. A concession to the grocers sectionally was also opposed.

**Edinburgh.**—The fourth meeting of the present session of the Edinburgh Chemists', Assistants' and Apprentices' Association was held at 36 York Place, Edinburgh, on February 1, Miss Margaret McA. Smith (president) in the chair. The first communication was *How to Get a Good Photographic Picture*, by Mr. James W. Laing. Mr. Laing said that they should endeavour to get away from the trade aspect of photography and concentrate on the possibilities of producing better pictures of their own for the pleasure to be obtained from them. The amateur photographer equipped with a camera and stand had been the target of innumerable humorists. Amateur photography had a great attraction for its followers, and it was the attraction of one branch of it that he wished to speak about, namely, outdoor photography. The day when colour photography would be a commonplace was

probably not far distant, but meantime they must make the most of the limitations of monochrome. He could say from experience that were they to limit the number of times they exposed plates or films to those when the sun was shining there would be fewer disappointments with the results. For instance, one could only obtain successful pictures with a hand camera when the light was good. Mr. Laing exhibited a series of slides in demonstration of his various points. The importance of the source of light should not be overlooked. When the light fell on the object from the side the shadow fell at an angle, and this gave the best effect. The next communication was *The Chemistry of Photographic Processes*, by Mr. J. W. Teesdale, who gave, by means of photographic slides of the formulas of the chemicals used and the reactions taking place in the photographic processes, a clear explanation of developing, reducing, fixing, intensifying, toning and printing. The reading of the papers was followed by a discussion, and, on the motion of the chairman, a vote of thanks was awarded to Mr. Laing, Mr. Teesdale, and Mr. Skinner.

**Manchester.**—A joint meeting of the Manchester Pharmaceutical Association and the local Branch of the Pharmaceutical Society was held on February 13, Mr. E. H. Simmons in the chair. Mr. Simmons announced that Professor R. A. Eastwood, who was to have addressed the members, was unfortunately ill, and the lecture would have to be postponed. He expressed sympathy with Professor Eastwood, and hoped he would have a speedy recovery. Mr. Simmons gave a short talk on *Test Cases that made Pharmaceutical History*. He said that the intentions of the framing of the 1868 Act were very different from what subsequent experience had proved to be the judicial interpretations of the different clauses. Had the clauses been drafted with greater care, and the framers had been able to visualise some of the later developments, it could have been made a much more powerful weapon for promoting the objects for which it was designed. Mr. Simmons then reviewed a number of cases which had been fought in the law courts, which had led to our present-day limitations and difficulties. The most striking development of pharmacy was the ramifications of the limited liability companies. The right of limited companies to keep open shop was determined in a long legal fight in 1879, and the final decision was in favour of the company. In 1908 the position of companies trading in pharmacy was regulated and conditions laid down under which they could carry on business. He explained why the designation "pharmacy" could be used by unqualified vendors. In Northern Ireland the use of the word "pharmacy" was restricted to pharmacists, and he hoped that this would be made applicable to Great Britain. The case in which the actual seller of a poison was made responsible was decided in 1890. A case brought by the Society against a grocer in 1893 for selling chlorodyne was decided in favour of the Society and upheld on appeal. One of the points laid down by the judges was "that a person who is not a chemist cannot sell a proprietary article containing poison." Mr. Simmons then dealt at some length with the action of Jenkin v. the Society in 1920, which led to the formation of the R.P.U. After a number of questions had been asked and replied to, a vote of thanks, proposed by Mr. J. H. Franklin, and seconded by Mr. J. Grier, M.Sc., was carried.

**Southend-on-Sea.**—At a meeting of the Southend-on-Sea Association of Pharmacists on February 12 Mr. Rollin (president) introduced Mr. John Keall, member of the R.P.U. Executive Committee, who gave an address on *The R.P.U. and its Activities*. Mr. Keall opened his remarks with the information that panel chemists would, without doubt, receive full payment for their work in 1928, which constituted a real victory for the R.P.U. Their policy in taking over control of the drug fund had fully justified itself. Mr. Keall turned to the political activities of the R.P.U., and commented on the success of Mr. Bennett at South Battersea. Mr. Keall gave examples of recent cases handled by the C.D.A. In conclusion, the speaker referred to the prosperous condition of the Chemists' Mutual Insurance Company and the Chemists' Sicknes and Provident Society.



By S. Howard Withey, F.C.I., etc.

By keeping the books of account on the self-balancing principle, the sales ledger can be balanced quite independently of the other ledgers. To do this, the amounts posted to the ledger from the different books of prime entry will have to be collected in total form. To the total of the debts outstanding at the commencement of the month or period should be added the total of the amounts recorded in the sales book during the period (after deducting the returns inwards and allowances, if any), and from this figure should be deducted the total amount of cash received from credit customers, as recorded in the cash book, and also the total discounts which have actually been allowed. The result will give the total of the book debts outstanding at the close of the month or period, the accuracy of which can be proved by adding up the items enumerated in the list of sales ledger balances extracted at that date.



## Ortho, Meta, Para

By Leonard Dobbin, Ph.D.

(Concluded from the C. & D., February 9, p. 164.)

### V.—Position Isomerism: The Problem Solved

TURNING now to some considerations which aided in solving the problems as to which of the three members of each isomeric group of di-substituted benzene derivatives was to be regarded as ortho-, which meta- and which para-, one of the simplest of these was based upon the fact that of the two earlier known benzene dicarboxylic acids, viz., phthalic acid and terephthalic acid, it was only the former of these which, by the loss of a molecule of water, yielded an anhydride. On the strength of this fact it was suggested that in phthalic acid the carboxyl groups were related to two immediately adjacent carbon atoms of the benzene nucleus, i.e., these occupied the 1:2 or ortho-position. On the subsequent discovery and examination of isophthalic acid, it was ascertained that, like terephthalic acid, it did not yield an anhydride.

The accuracy of the above-mentioned suggestion with regard to phthalic acid was afterwards definitely established. It must be mentioned, however, that the somewhat closely analogous suggestion that the two hydroxyl groups in quinol were similarly related to two immediately adjacent carbon atoms, because this substance readily yielded quinone by the loss on gentle oxidation of two atoms of hydrogen, whereas neither of the other two isomerides, catechol and resorcinol, underwent an analogous change, was subsequently found to be erroneous.

Early evidence from another source supported the view that phthalic acid was the 1:2 dicarboxylic acid.

Erlenmeyer suggested that the molecule of naphthalene might be regarded as made up from two benzene nuclei, but with two immediately adjacent carbon atoms common to both nuclei. On oxidation, naphthalene yields phthalic acid, and if the accuracy of Erlenmeyer's suggested constitution of it be assumed—an assumption which Gräbe showed, upon experimental grounds, to have a certain degree of foundation—the 1:2 position in phthalic acid would follow.

One of the most satisfactory items of evidence which chemists possessed at a comparatively early date was

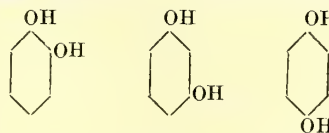
derived from the formation of mesitylene, by condensation, from acetone; from the suggestion by Beyer that this substance had its three methyl groups symmetrically arranged with respect to the carbon nucleus (in the 1:3:5 positions); and from the experimental demonstration subsequently given by Ladenburg that this arrangement actually existed in mesitylene. The dicarboxylic acid (isophthalic acid) obtainable from mesitylene by simple reactions would thus contain its two carboxyl groups in the 1:3 or meta-position. The accompanying diagram, reproduced from "Zeitschrift für Chemie," published in 1867, exhibits Kekulé's method of illustrating the formation of mesitylene,  $C_6H_3(CH_3)_3$ , by condensation from three molecules of acetone,  $CH_3.CO.CH_3$ , by the removal of three molecules of water. The details of Ladenburg's proof of the symmetry of mesitylene form matter for presentation in text-books of organic chemistry, and are to be studied there.

The most convincing evidence in establishing which of the genetic classes of di-substitution products is ortho-, which meta- and which para- came almost simultaneously but quite independently from Körner and from

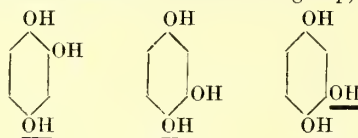
Griess. The kind of consideration which eventually led Körner to success can be recognised not only in his own discussion of isomeric di-substitution compounds as early as 1867, but also in Kekulé's original paper of 1865. Körner's own statement in 1867, in the "Bulletin de l'Académie Royal de Belgique," is as follows:—

"Suppose it to be shown that the three bihydroxylic derivatives of benzene can, by the introduction of a third HO group, give rise to the same trihydroxylated benzene—phloroglucine, for example—it will be evident from this that in the trihydroxylic product the three HO groups must occupy the positions one, two and four. There is, in fact, no other arrangement of the three hydroxyls which can combine in itself the three cases of the relative positions of the two hydroxyls in the three bihydroxylic derivatives of benzene."

To illustrate this view: if the three formulæ



represent the isomeric di-hydroxy benzenes, the only single tri-hydroxy benzene derivable from all three of them by the introduction of a third OH group, would be:

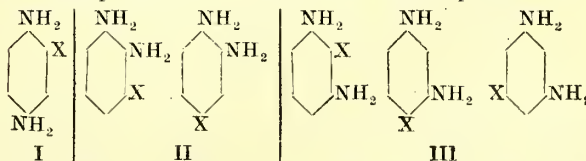


that is, it would be the isomeride with the arrangement 1:2:4 (or 1:3:4, which is identical with 1:2:4).

The statement of Körner's view did not, however, carry the matter very far in 1867, as the subject was, at the time, wholly unexplored experimentally. Seven years later Körner was able to advance and, moreover, to support by a mass of the most laboriously accumulated experimental evidence the now well-known view that in forming tri-substitution compounds from three isomeric di-substitution compounds having the same substituting atoms or groups, when the third substituting atom or group was likewise similar, the 1:4, or para-compound, could only give one such tri-substitution compound; the 1:2, or ortho-, compound could give two, and only did give two; and the 1:3, or meta-, compound could give, and in some instances did give, three. Here we have arrived again at ordinary organic chemistry text-book material.

Körner now showed, further, that a tri-substituted derivative existed with three similar substituting atoms which could, in fact, be obtained starting from all three of the corresponding di-substituted derivatives, and that this could only be the 1:2:4 (or 1:3:4) compound. This was the realisation of the possibility foreshadowed in his paper of 1867.

Griess, also in 1874, published a demonstration of the actual state of matters as regards 1:2, 1:3 and 1:4 di-substitution compounds, closely analogous with that of Körner, but dealing with the problem, so to say, in the reverse direction. Thus he showed that the phenylene diamine,  $C_6H_4(NH_2)_2$ , with m.p.  $147^\circ$ , is producible from one only of the isomeric diamido-benzoic acids, that the isomeride with m.p.  $102^\circ$  is producible from two, and the isomeride with m.p.  $63^\circ$  from three of these diamido-acids. Accordingly the first of these phenylene diamines must be the 1:4 compound; the second, the 1:2 compound, and the third the 1:3 compound:—

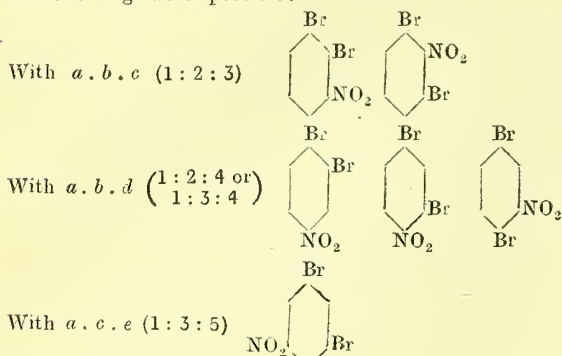


The letter x in each formula represents the position of the COOH group.

It only remains now to refer again briefly to the fact already mentioned that the conception underlying



Körner's neat demonstration was already contained in Kekulé's paper in Liebig's "Annular" (1866). In enumerating the possible isomerides, Kekulé indicated that in the case of di-bromo-nitrobenzene,  $C_6H_3Br_2NO_2$ , the following were possible:—



Körner's rule is easily deducible from these considerations. It does not appear, however, that Kekulé in 1866 had realised the far-reaching value which the conception possessed.

## Agricultural Notes

### DETERIORATION OF NICOTINE-SOAP PREPARATIONS

INVESTIGATIONS carried out a few years ago showed that hard soaps made from sodium hydroxide, menhaden fish oil and nicotine solution lose nicotine rapidly on storage regardless of the type of package, and that potash soaps (soft soap) and soft soda soaps containing nicotine retain practically their original nicotine strength for a period of four years. In other words, whether nicotine is lost or not depends on the physical condition of the product. It was further reported that any loss of nicotine was due, not to volatilisation, but to chemical changes, whereby it was converted into an insoluble, non-volatile polymeric form or condensation product, probably the latter, as the decrease in nicotine was accompanied by a decrease in the fatty acids of the soap, indicating a reaction between the two. Recently, further work has been done on this subject by C. C. McDonnell and J. J. T. Graham ("Industrial and Engineering Chemistry," January 1929), who state that soap-nicotine preparations ordinarily found on the market decrease in nicotine content on storage. Hard soaps lose nicotine more rapidly on exposure to the air than potash soaps. However, soft soda soaps and potash (soft) soaps lose it at about the same rate. Excess of alkali or fat in the soaps has no appreciable influence on the rate of loss. The loss of nicotine from soap-nicotine preparations made with drying oils (fish oils, cottonseed oil, linseed oil) and packed so that air is not excluded is due mainly to oxidation, the nicotine with part of the fatty acids of the soap being converted into an insoluble condensation product of indefinite composition. The loss of nicotine from soap-nicotine preparations made with non-drying oils (oleic red oil, stearic acid) and stored without air being excluded is due to volatilisation of nicotine, no insoluble condensation product being formed. Both hard and soft soaps, whether made from drying or non-drying oils, when packed so that they were completely protected from the air, suffered no loss in nicotine content during two years of storage.

### THE RATIONALE OF GREASE BANDING

A PARTICULARLY devastating orchard pest, yet one of the easiest to control, is the winter moth. Belonging to the family Geometridæ, it is sometimes called the Evesham moth, though equally common in other orchard districts. The Sittingbourne and Faversham areas in Kent, as well as parts of Gloucestershire, Worcestershire and Hereford, have suffered severe outbreaks. The damage is done by the caterpillars known from their heel-to-toe method of progression as "loopers" or

"measurers." They will completely strip an orchard of leaves, the trees looking in the height of summer exactly as in the depth of winter. Chemists in fruit-growing districts should be acquainted with the peculiarity in the life cycle of the winter moth, which gave the clue to the method of control known as "grease-banding." The moth hatches out from its cocoon in the soil during October, November and December. The females have only rudimentary wings, useless for flight. After impregnation the female moth crawls up the tree to the twiggy area, so as to lay her eggs just where many months later the tender green shoots, opening in response to the warmth of spring, will provide nourishment for the minute caterpillars hatched out by the same influence. Fruit-growers can take advantage of the physical infirmity which compels the female moth to reach her goal by crawling up the stem, and bar her path effectively by surrounding the tree stem with a permanently sticky "grease band." The bands must retain their tackiness throughout the period when the winter moth is on the move. A six-inch wide strip of grease-proof paper is tied round the stem with bass or twine. Rough bark must be smoothed so that no fissures allow the moth to creep underneath. The banding material is usually applied with the palm of the hand while walking round the tree. A brush or flat piece of wood is preferred by some. While a first-class banding material will retain its tackiness for a year or more, the bands must be inspected and, where dead leaves, dust or the bodies of moths have choked them, a fresh surface must be exposed by scraping. The bands trap huge numbers of leafhoppers, aphides, earwigs and ants.

### TETRACHLORETHANE FOR GLASSHOUSE FUMIGATION

TETRACHLORETHANE was largely used as an aeroplane dope during the war, and has since had an extended industrial use as an organic solvent, in consequence of which manufacturing processes have been improved and cost cheapened. It was first introduced into horticultural practice in 1920. An investigation as to the best method of application under commercial conditions, and the lowest concentration which will control certain pests on a variety of glasshouse plants has been undertaken by T. Parker, whose work is described in the "Annals of Applied Biology" (May 1928). Results indicate that the most satisfactory fumigations are obtained by impregnating sacks (hung from the wires) with the fumigant. A commercial control of adult white fly can be obtained by using  $2\frac{1}{2}$  to 5 fluid oz. per 1,000 cub. ft., providing the temperature is maintained at 65-70° F., and the house is reasonably tight and the fumigation proceeds for twelve hours. High concentrations must be used to destroy the nymphal stage, but it is considered that three fumigations at 5 fluid oz. concentration, given at intervals of a week or ten days, should be sufficient to keep in check an ordinary infestation. Some growers fumigate once a fortnight as a precautionary measure, using  $2-2\frac{1}{2}$  fluid oz. in the early part of the season. Care must be exercised when using this material, owing to the possibility of decomposition during storage with the formation of hydrochloric acid. The product should be tested before use if held in stock for any considerable length of time. The effect of tetrachlorethane on fifty-five plants is recorded, those badly affected being: Balsam, canna, cineraria, chrysanthemum, crassula, lemon plant, sweet pea, and pink hydrangea. The fumigant appears to be selective in its action upon white fly and mealy bug. Certain species of aphides seem to be unaffected. The selective toxic action of the chemical to insects is interesting, and it has recently been suggested that being an organic solvent it has some action upon the waxy covering of the "fly" in both the scale and the adult stages causing it to run, thereby upsetting the delicate mechanism of breathing. It is probably not a tissue poison in the proportions used, otherwise it is hardly likely that green fly would escape its action.

SALES in the drug department of the Coalville Co-operative Society for the half-year ended December 29, 1928, amounted to £1,662, against £1,393 during the same period of 1927.



## A New Zealand Holiday

**BREAKING** fresh ground for holidays is always a risky business; and it was with feelings of doubt that we decided on Leigh, a small resort some forty miles, as the crow flies, from Auckland. However, our choice was such a happy one that I have decided to record some of our impressions. Although hardly more than a village hamlet, this secluded little spot has a charm all its own, and offers extraordinary recuperative benefits to the jaded business man. Leigh may be reached by either overland or sea route. The water trip takes the little coastal steamer anything from four to seven hours. If taken in daylight, the run down is pleasant (provided one is a good sailor) and interesting. The unloading of stores, manures and seeds for the farm, along with the corresponding loading of a varied collection of products destined for market, is a fascinating study.

For those who prefer overland travel the trains and service cars are available. Trains are not fast in New Zealand. The redeeming feature is that plenty of time is available to enjoy the scenery and to study the wayside life. The heavy bush has already been removed, and farmsteads are springing up, gradually giving to the landscape an air of prosperity. Our methods of transport surprise and interest the overseas visitor. Predominating is a very popular make of motor. It may be in the guise of a car, a lorry or a tractor, but it will be there. Horse-drawn wagons and carts are not nearly so common as they were a few years ago; but one may be fortunate enough to see an old sledge sliding along, and perhaps a glimpse may be caught of a bullock team at work drawing a huge log slowly but surely to the mill, there to be ripped into timber. The most amusing sight of the lot is to see a beautiful closed-in car drive up to a station and discharge not passengers, but three or four small calves that have been reclining on a few sacks. A motor-car must earn its keep in New Zealand. Three hours after leaving Auckland, and sixty-five miles from it, we join a motor-bus on a ten-mile run to Wankworth, a very old settlement.

### TYPICAL TREES

It is on this run that one sees some fine young specimens of New Zealand trees. Pines are conspicuous, and young kauris thrive. This pine, the king of our native trees, grows in the northern part of the North Island. Much wealth has come into the country from the sale of its gum, but, in these days of synthetics, the demand and price have diminished considerably. The timber is ideal for building purposes, and, as the trees grow up to 100 feet, the output from a single kauri is by no means small. Unfortunately, they are not quick-growing. One of our foremost botanists has said that the most ancient kauris, although still exhibiting the exuberance of youth, must have originated long before the Christian era. The totara, too, is plentiful. It is a considerably smaller tree than the kauri. Its wood is durable and is much sought after for fencing posts and house blocks. Perhaps our prettiest tree is the rimu, or New Zealand red pine. The timber, when dressed, shows beautiful markings, and, despite the fact that it is a comparatively hard wood, it is in great demand by furniture manufacturers. Here and there one runs against an extensive clump of kahikatea, or white pine. It abounds in swampy places, often to the exclusion of all other trees. The softness of the wood and its susceptibility to the attacks of insects render it unsuitable for house timber, but it is extensively used in the manufacture of butter boxes.

Although the Maoris and bushmen have used many of the plants for medicinal purposes, one cannot say that any of them have been developed along commercial lines. However, of late years Mr. Ray Gardner, M.Sc., A.I.C., Ph.C., has done much good work investigating the chemistry of our native plants. The land here some years ago was extensively worked for orchard purposes, but, owing to market conditions, fruit farming has given way to dairy farming. Through Wankworth and over the hills we come to Matakana, a thriving little farming centre of which the residents are intensely proud. A dairy factory run on co-operative lines, a tiny post office,

a boarding house and a couple of stores constitute the township; yet in this little place was held, this year, one of the most successful shows in the country. The prosperity and solidarity of country districts can never be accurately judged by appearances. Matakana has quite an old English appearance; tall poplars abound, tiny creeks trickle toward the river, while even the cows and fields remind one of an English village. A change of transport is made here. Many country places are served by mail cars, and our destination, Leigh, is one of these. We are packed into a seven-seater car along with a collection of mail-bags, newspapers, parcels, loaves of bread, joints of meat and luggage, and, after a mile or so, shake down.

### THE ATTRACTIONS OF LEIGH

On reaching Leigh we were soon accommodated at the hotel which, for a seaside place, was particularly well-appointed. If Matakana is English, Leigh is even more so. The hospitality of the people is remarkable. Although strangers to them all, each vied with the other to make our stay among them enjoyable. The harbour is well sheltered, and is the headquarters for a little fishing fleet. In the old days it was the centre of many a smuggling trip. Occasionally the Maoris would find out what was going on and quietly help themselves to the buried treasure, much to the disappointment of someone. The Maori would appreciate such a trick on the pakeha (white man). A few interesting trips can be taken from Leigh. Those fond of a tramp will be well rewarded by a visit to Cape Rodney. Here one is sure to be treated to some excellent seascapes. On a clear day one can see Whangarei Heads, nearly forty miles away, while ten miles to the east lies the Little Barrier. This island has been set aside as a bird sanctuary and houses the rarest of New Zealand birds. Three Maori chiefs originally owned it; but one, becoming short of money, sold his share to the Government, who attempted to buy out the remaining two. They had no desire to leave, and refused the offer; not to be thwarted, the Government lodged the money in the Treasury and, with the aid of the constabulary, removed them. One steadfastly refused to touch the money, and eventually established a settlement at Leigh. After many years and many trips to Wellington, the capital, the dispute with the old chief was settled. We have been told that we are very lenient towards the Maori; but, as a race, they are vastly superior to any other natives. The country pharmacist knows that, if he cures a complaint for one of them, he gains not only a friend for life, but an advertisement not to be despised. When they have the money, they are good spenders; soaps and perfumes, the more highly coloured the better, and particularly when perfumed with violet, are in great demand. When money is short, they are the greatest bargain hunters that exist.

For some time past it has been supposed that big fish frequent the grounds adjacent to Leigh, and the last season or two has proved the supposition to be correct. While the writer was present on two separate occasions mako and hammerhead sharks were brought in. One turned the scale at 301 lb. and the other at 500 lb. Both of these were caught with the rod, and gave most exciting sport. It is only a matter of time before Leigh will be a real fisherman's paradise. Holidays in New Zealand are what one makes them. One must be prepared to make the most of everything, overlook an occasional shortcoming, and not expect too much in the way of luxurious comfort. The variety of wonderful scenery, the sport and the fellowship of the people compensate for much. One throws convention to the wind and is able to do what one should when holiday-making—relax and recuperate.—R. E. C. (2/11).

**A CHANGING WORLD.**—"A few weeks ago," writes a correspondent, "a lady bought a rubber hot-water bottle, and did not use it for a fortnight; when it was needed, it leaked. She went back to the chemist who had sold it, and he changed it. Another few weeks elapsed; one night, on examining the bottle, the customer saw sticking out of it a darned needle black with age. Once more she went to the unfortunate chemist, who gave her yet another bottle."



## Symbiosis

At a recent evening meeting of the Royal Institution of Great Britain, Miss Doris L. Mackinnon, D.Sc., Professor of Zoology at King's College, London, gave a paper on "Life's Unsuspected Partnerships," from which the following paragraphs are selected:—

Symbiosis is the word used by biologists to describe the state of affairs in which two or more different kinds of organisms are closely, and in some cases inseparably, associated for the greater part of their lives in a partnership from which both, in some degree, probably draw benefit. Saprophytic light-giving bacteria are abundant in the sea, and are inevitably swallowed by feeding animals, in the dead bodies of which they multiply exceedingly, and produce the phenomenon of phosphorescence that may be noticed, for example, in rotting fish. Among the genus *Talitrus*, which are normally not luminescent, one is occasionally found glowing. Such individuals are always diseased, and if their infected blood be injected into the bodies of other like crustaceans, these also begin to glow and soon die. For some animals, the incursion of luminescent bacteria is directly harmful. Others have acquired immunity against the invaders, and have even turned the invasion to account. Such are the pelagic tunicates and the cuttle-fishes.

### DIFFERENT MEANINGS OF "SYMBIOSIS"

It is known that many bacteria are mutually interdependent and will not flourish when isolated from their fellows—possibly a second degree of symbiosis within the first. In these cases the light would seem to be the product of captured bacteria. The term symbiosis is used, though the special advantages that accrue to the microbe partner are not understood. While the symbiosis productive of luminescence may give protective advantages or facilitate mating, other and far commoner examples are concerned with nutrition. The primary concern of all living organisms is with food. In the more intimate associations, as of green plant with fungus or bacteria or protozoa, the microscopic partner has been called in to perform some function that the larger partner cannot perform for itself. Strictly speaking, symbiosis describes a condition where equilibrium is established between the partners. True parasitism may be said to occur when the benefiting organism gets the upper hand so far that it lives actively upon its host's tissues or diverts so much of the available food that the host dies of starvation. In the course of ages many harmful parasites may become innocuous; and as their hosts develop an immunity, they may even become useful symbiotes.

The habit of fungus-culture is found in one of the families of termites, and among certain beetles, as *Hylecoetus dermestoides*, the larvæ of which live in tunnels that they make in fresh wood. These larvæ, when they hatch out, feed upon the mycelial nodules, rich in protein, which line their tunnels. It has recently been shown by Buchner that the adult female *Hylecoetus* has on her ventral side two elongated pockets filled with thick-walled fungal spores, and between these pockets lies a gutter also filled with spores. All these structures end just where the oviduct opens to the exterior, and the eggs as they are laid get smeared with the spores squeezed out on them by the muscles of the abdomen. The eggs are deposited on the bark of a tree, and the larva, in eating its way out of the egg-shell, devours with that the spores and so gets infected. The larva burrows into the wood, and the spores, passing through its body uninjured, are deposited in the excrement, germinate, and, even in the powdered wood in the tunnel, produce a flourishing supply of rich fungal food.

### CELLULOSE DIGESTION

In the wood-wasps of the genus *Sirex* the infecting apparatus consists of two syringes filled with the ooidia of a fungus, and between the syringes is a gland, the sticky secretion from which mingles with the fungal material as it is squeezed out when the eggs are laid. The mycelial growth that appears within the larval tunnels is never so rich as with *Hylecoetus*, and here it may be that the grub merely makes use of the fungus as an aid to the digestion of the gnawed wood, about 50 per cent. of which is pure cellulose. Cellulose does not occur in

animal tissues (except the group of the tunicates), and there are very few animals that produce enzymes capable of splitting it up and putting it in a more assimilable condition. No vertebrate can digest cellulose unaided, and among the invertebrates the only established examples are those of certain snails, the shipworm, the crayfish, the earwig and a butterfly. Innumerable insects live on vegetable matter containing a high percentage of this indigestible material; although they seem able to make use of it, they secrete no cellulose-splitting enzyme. The suggestion is that they call in the aid of fungi and bacteria that have this peculiar power.

### THE WOOD-EATING TERMITES

Some termites habitually cultivate fungus-gardens, and such species live on rotting wood and other vegetable matter *plus* the assisting fungus. The true wood-eating termites, and these form the majority of families, cut up and eat wood that is quite fresh; and termites of these families do not cultivate fungus gardens. The wood on which they depend for subsistence contains at least 50 per cent. of cellulose, and the experiments of Cleveland have proved that such termites, kept in the laboratory, can live for at least three years—perhaps indefinitely—on a diet of pure cellulose. The cellulose-fed termites in the laboratory behaved in exactly the same way and flourished just as well as the controls living on a more normal-seeming wood diet. Now cellulose is indigestible even by termites, which secrete no cellulose-splitting enzymes; and these families have not even got fungus to aid them. But it has been known for a long time that the gut of the true wood-eating termite that does not cultivate fungus, harbours protozoa, a writhing multitude of inter-sliding protozoan bodies almost blocks the gut of a healthy termite worker and constitutes about half its total body-weight. In spite of their relatively large size and the vast numbers of motile threads covering their bodies, they are ranked by protozoologists among the flagellates, where they form a special and peculiar group, the Hypermastigina or trichonymphids. It seems that each genus of wood-eating termites has its own special association of trichonymphids.

### TRUE SYMBIOTES

The soft protoplasmic bodies of the flagellates are generally crammed with tiny fragments of termite-masticated wood which they have picked up: they have no mouths, but probably take in the particles at the naked posterior end of the body. It has long been suspected that these flagellates are not parasites of the termite, but true symbiotes in the highest degree, conferring incalculable benefits on their hosts, and, richly compensated in return by food and shelter, become incapable of living a separate existence. It has been suspected that these protozoa, like certain fungi and bacteria, have the power of splitting up cellulose, living on the more assimilable products and handing over to their hosts a certain proportion thereof, adequate not only for the particular individuals they inhabit, but also for the dependent castes. Cleveland's experiments have demonstrated this. The flagellates, for their part, cannot live for more than ten days when removed from their termites, and then only in a special blood-serum to which finely-powdered ligno-cellulose is added. They have never been known to form protective cysts, and, so far as is known, they do not occur anywhere else in nature. The exact method by which they are transferred from termite to termite is not fully understood—though probably they pass in the semi-fluid substance from the ani of the workers. The association between these partners is undoubtedly of very long standing—it must have taken many ages to evolve the exact adjustment between them and the extraordinary specialisation found. It is not known in what form the broken-up cellulose is handed on to the insect. A great deal of glycogen (animal starch) is always found in the bodies of the trichonymphids, though none occurs in the intestinal cells of the termite. Even when the diet has been pure cellulose for as much as three months, the protozoa still contain glycogen. The suggestion is that they split the cellulose into the sugar glucose, which they then build up into glycogen. How they hand over the excess to their partners, or whether, as seems possible, their own bodies are sacrificed in the process is not yet known.



## Trade Notes

AN announcement of interest to manufacturers of perfumery and toilet articles appears on page 30 of this issue.

SAVILLE PERFUMERY, LTD., Watford, are making an Easter bonus offer, details of which will be available shortly.

POWDER PUFFS.—Spencer Brothers, 39-40 Shoe Lane, London, E.C.4, have always an exhibition of leading lines and novelties in powder puffs at their showrooms.

DUDLEY & Co., 451 Holloway Road, London, N.7, have issued a new illustrated list of window tickets, posters, shop fittings and allied articles, a copy of which can be obtained post free on application.

NAIL POLISHING STONE.—Morny Frères, Ltd., 6 New Burlington Street, London, W.1, are supplying Brille-Block nail-polishing stone in a new container. This latest Morny creation is illustrated elsewhere in this issue.

BOOKLET ON OTTO OF ROSE.—V. Friinghian, 23 Rue du Renard, Paris, European agent for J. Batzouroff & Fils, Sofia, will be pleased to supply a copy of a booklet entitled "The Rose in Bulgaria" (printed in English) to anyone interested.

THE PERONIA CO., LTD., Stoney Street, Nottingham, are offering a £20 cash prize for the best scheme submitted for introducing through the chemist their new product, Ideenit. Particulars of the competition, which closes on March 1, are given in the advertisement pages.

THE attention of chemists is directed to the two-color advertisements in this issue, where will be found announcements by Alfred Bishop, Ltd., 48 Spelman Street, London, E.1; Burgoyne, Burbidges & Co., Ltd., East Ham, London, E.6; and J. C. Eno, Ltd., 160 Piccadilly, London, W.

CHEMISTS in Ireland who contemplate the addition of an optical department to their business will be interested to know that Mr. C. A. Scurr, F.S.M.C., chemist and druggist, 50 High Street, Barnet (near London), is proposing to form a class to prepare students for either of the recognised optical examinations.

THE importance of light, easily-assimilated, nourishing diet during illness and convalescence cannot be overestimated. The chemist's opinion is often asked in this matter, and on such occasions (particularly at the present time) it is well to bear in mind that in this respect Benger's Food has a reputation second to none. Show material and recipes can be obtained from Benger's Food, Ltd., Otter Works, Manchester.

MATTE TEA.—Peek Brothers & Winch, Ltd., 20 Eastcheap, London, E.C.3, point out in their advertisement in this issue (where full details of sizes are given) that not only is Matte Real of considerable interest to those concerned with dietetics, which subject has lately been given great publicity in the lay Press, but so far as the chemist's business is concerned it creates an extra and not a substitute sale. Plenty of show material is available, and a good-sized sample of the tea will be sent to any chemist who asks for it.

OSTELIN is a vitamin D concentrate, formerly extracted from the unsaponifiable fraction of cod-liver oil, but now prepared by irradiation of ergosterol. It is tasteless and odourless, and its therapeutic potency is controlled by physiological tests. The standard suspension in glycerin is equivalent in vitamin D potency to twenty times its volume of the finest medicinal cod-liver oil; this preparation, commonly known as Ostelin, mixes readily with all other medicaments and requires no suspending agent when added to aqueous mixtures. Dose: 2 to 10 minims (children 1 to 4 minims). The following are some of the preparations containing it. They are obtainable through the usual wholesale channels or from Glaxo House, 56 Osaburgh Street, London, N.W.1:—Elixir Ostelin; Ostelin Emulsion; Ostelin Tablets; Ostelin with Parathyroid Tablets; Ostelin Ampoules; Ostomalt.

## Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1929, p. 333.

(From "The Trade Marks Journal," January 30, 1929.)

"GANNA WALSKA PARIS" on inverted pyramid shape; for all goods (48). By Société Parisienne des Produits de Beauté Ganna Walska, 225 Rue de Paris, Pantin (Seine), France. 495,539.

Conventional design resembling lion; for tooth paste (48). By Geuatosan, Ltd., 43 Regent Street, Loughborough, Leicestershire. 497,154.

(From "The Trade Marks Journal," February 6, 1929.)

"VITROCOL"; for chemicals (1), scientific instruments, etc. (8), glass (15). By The J. M. Newton Vitreo-Colloid (1928), Ltd., Africa House, Kingsway, W.C.2. 495,471/473/475. (Associated.)

"EXETTS"; for an internal medicine (3). By A. Robertson, 52 Moss Street, Paisley. 491,136.

"DIGI-VAL"; for a pharmaceutical preparation (3). By A. Gamir, 9 Calle Padre Josfré, Valencia, Spain. 496,133.

Safety First: Take "KOFFNIPS" on picture of snow scene ("Safety First" and "Koffnips" disclaimed); for medicated sweetmeats (3). By F. Priestley & Sons (Leigh), Ltd., Leigh Bridge, King Street, Leigh, Lancs. 495,500.

"GORUN"; for all goods (3). By H. G. Jacobson, 38 Fritschestrasse, Charlottenburg, Berlin. 496,893.

"FRIAR TUCK'S CHERRY GINGER WINE"; for medicated cherry ginger wine (3). By Cupal, Ltd., King Street Bridge, Blackburn. 496,970.

"THE MOON"; for surgical instruments, etc. (11). By L. Offner and Esther Wein, 173 Amhurst Road, Hackney, E.8. 497,743.

"CALMA"; for glass articles for use in applying toilet cream and shaving soap (15). By C. Argles, 35 Westwell Road, Streatham Common, S.W.16. 497,354.

"KODELUXE"; for all goods (39). By Kodak, Ltd., Kingsway, London, W.C.2. 495,547. (Associated.)

"ASORDIN"; for all goods (47). By I. G. Farbenindustrie A.G., 23 Mainzer Landstrasse, Frankfurt-on-the-Main, Germany. 498,200.

"ICEMA"; for perfumery, etc. (48). By Hedges (Chemists), Ltd., 10 Dale End, Birmingham. 495,811. (Associated.)

"METHOLATUM HAIR TONIC," 124, on device including head of lady in Pompadour style; for toilet preparations for the hair (48). By Mentholatum Co., Ltd., 7b Building, Fairlie Road, Slough. 496,098. (Associated.)

"H C T" in diagonal form across square; for perfumery, etc. (48). By H. C. Taylor, The Laboratories, Bury New Road, Prestwich, Lancs. 498,158.

"CAMELÉON"; for rouge (48). By P. W. Ducker, 376 Rue Saint Honore, Paris. 496,859.

### ALTERATIONS OF THE REGISTER

According to "The Trade Marks Journal" of February 6, 1929, leave has been given to A. S. Hinds, Ltd., to alter Trade Marks Nos. 287,008 and 448,337 for "Hinds' Honey and Almond Cream."

(From "The Trade Marks Journal," February 13, 1929.)

"KODACOLOR" on oblong shape; for all goods (1). By Kodak, Ltd., Kingsway, London, W.C.2. 494,525 (Associated.)

"VITEGAS"; for photographic chemicals, plates and films (1). By Kosmos Photographics, Ltd., Pixmore Avenue, Letchworth, Hertfordshire. 497,821. (Associated.)

"ADURA"; for medicinal glycerin (3). By G. Schicht A.G., Dresdnerstrasse 34, Aussig, Czecho-Slovakia. 497,250. (Associated.)

"GLAUKOSAN"; for a preparation for treatment of the eyes (3). By M. Woelm A.G., Spangenberg, near Kassel, Germany. 497,779.

"VITABEND"; for medicinal tablets (3). By M. Isaacs, 14-16 Cockspur Street, London, S.W.1. 498,006.

"DIGINUTIN"; for medicinal chemicals (3). By The Wellcome Foundation, Ltd., 67 Holborn Viaduct, London, E.C.1. 498,073. (Associated.)

"TOILENE"; for soap delivering machines (6). By G. F. R. Pingar, Graydon Lodge, Lichfield Road, Four Oaks, Warwickshire. 497,600.

"SOFTEXE"; for sanitary towels (11). By Cuxson, Gerard & Co., Ltd., 26 Fountain Lane, Oldbury, Worcestershire. 497,112.

"SAIL" with device of sail bearing letter "A" (Letter "A" disclaimed); for toilet paper (39). By G. M. Assael, Ltd., 6 Jewry Street, London, E.C.3. 497,711.



## Births

Notices for insertion in this column must be properly authenticated.

HEPBURN.—At Glenview, Newarthill, Motherwell, on February 11, the wife of C. T. Hepburn, chemist and druggist, of a son.

SCRAGG.—At Cremona House, Swadlincote, on February 16, the wife of Albert Scragg, chemist and druggist, of a son.

## Marriages

BARNETT—LUNN.—At St. Paul's Church, Wokingham, recently, Charles Peter Barnett, chemist and druggist, eldest son of Mr. C. Barnett, chemist and druggist, Uppingham, to Violet Alice Lunn.

BURGESS—LISTER.—At St. Peter's Church, Ashton-under-Lyne, on February 12, Fred Burgess, to Phyllis, daughter of Mr. G. H. Lister, chemist and druggist, Ashton-under-Lyne.

McMAHON—McCARTNEY.—At St. Andrew's Presbyterian Church, Durban, South Africa, on February 11, Samuel McMahon, M.B., Ch.B., Benoni, to Mary McCartney, chemist and druggist.

## Deaths

BIRD.—At 52 King's Road, Brighton, on February 18, Mr. Albert Edward Bird, chemist and druggist, aged forty-seven. Mr. Bird was the proprietor of the business known as Hewett & Sons, which was founded in 1831 under the style of Foster & Else. It passed successively to the ownership of Mr. Hewett, his son and Mr. Powell, from the last-named of whom Mr. Bird purchased it.

BOOKER.—At 38 Main Ridge, Boston, on January 30, Sarah Ann, widow of the late Mr. Thomas Bar Joans Booker, chemist and druggist.

BUCHANAN.—At Holly Bank, Kirriemuir, on February 12, Mr. David Buchanan, retired chemist and druggist, aged seventy-seven. Mr. Buchanan was postmaster of Kirriemuir for thirty-five years, had held office in local bodies, and was senior elder of the Kirriemuir Parish Church. He is survived by a son (Dr. G. G. Buchanan, medical officer of health for Renfrewshire) and two daughters.

FERRIER.—At 7 Lint Riggs, Falkirk, on February 13, suddenly, Mr. James Ferrier, chemist and druggist, aged forty-nine. Mr. Ferrier was a native of Laurencekirk. After completing his apprenticeship, he had experience as an assistant in Arbroath, Edinburgh, Glasgow and Bath. Mr. Ferrier was in business for fifteen years at Lumley Street, Grangemouth, and six years ago he purchased the pharmacy in Falkirk. He was a member of Zetland Masonic Lodge and of Falkirk Bowling Club. Mr. Ferrier is survived by a widow, one son, and four daughters.

GEORGE.—At 2 Proud Cross, Kidderminster, on February 3, Mr. John George, chemist and druggist, aged seventy-eight.

HEBBLETHWAITE.—Recently, Mr. George Arthur Hebblethwaite, chemist and druggist, for many years in business at 16 Holderness Road, Hull. Mr. Hebblethwaite, who qualified in 1880, was one of the oldest members of the Hull Chemists' Association. In addition to the family mourners, there were present at the funeral, which took place on February 18, Messrs. C. A. Hewitt (vice-president of the Hull Chemists' Association), T. Newton, F. Earle, A. F. Snowden, W. H. Walton, J. J. Spilman, G. F. Fanthorpe, E. Jobling, H. Turnbull, and A. Rogers. Floral tributes were sent by the Hull Chemists' Association, Lofthouse & Saltmer, Ltd., and others.

JONES.—Recently, Mr. Nathaniel Stevens Jones, chemist and druggist, Coulsdon, late of South Kensington, London, S.W., aged seventy.

✓ KEENE.—At Weston-super-Mare, on February 13, after a long illness, Clara, the dearly loved wife of Mr. Frederic J. Keene, chemist and druggist, late of Oldbury and Smethwick.

✓ KNIGHTS.—At his residence, Ford House, St. Barnabas Road, Cambridge, on February 6, Mr. James West Knights, F.I.C., F.C.S., chemist and druggist, aged seventy-five. Mr. Knights served his apprenticeship to Mr. Turner, chemist and druggist, St. Ives, and subsequently became analyst in a chemical works at Flint. At the age of twenty-five he was appointed public analyst for Cambridge, and he held similar positions for Huntingdonshire, the Isle of Ely, Wisbech and King's Lynn. Mr. Knights, who was a prominent freemason, retired from office about a year ago.

✓ MANSON.—On February 11, Mr. David Manson, R.D., late of 79 Peter's Hill, Belfast, and for many years a member of the Chemists' and Druggists' Society of Ireland. Mr. Manson served his apprenticeship with Mr. James Acheson, Ph.C., Ballymena, and was subsequently with Mr. S. Gibson, King Street, Belfast, eventually taking over the branch at 79 Peter's Hill, which he carried on until he was laid aside by illness. Mr. Manson was a man of kindly disposition, and the news of his death caused widespread regret throughout Northern Ireland.

✓ STURTON.—On February 19, Mr. Samuel Ainsworth Sturton, Ph.C. Mr. Sturton, who passed the Major examination in 1891, was well known in the Shepherd's Bush district of London, where he carried on business for about thirty years. Latterly he sold his pharmacy in Goldhawk Road, W.12, and removed to Chiswick.

## Personalities

MR. F. W. SEARLE, chemist and druggist, has been appointed chief pharmacist to St. Bartholomew's Hospital, London, E.C.1, in succession to the late Mr. Langford Moore. Mr. Searle is a native of Cornwall, and served his apprenticeship with Balkwill & Co., chemists, Plymouth. After studying under the late Mr. Watson Wili at the Metropolitan College, London, S.W., he qualified in 1904. Mr. Searle joined the Pharmaceutical staff at St. Bartholomew's Hospital immediately afterwards, and became chief assistant to Mr. Langford Moore in 1913, with a considerable share of responsibility.



MR. F. W. SEARLE

MRS. DORRAN, wife of Councillor J. W. Dorran, J.P., chemist and druggist (chairman of Stretford Urban Council), has been presented with a chain of office.

MR. HERBERT SKINNER, Ph.C., president of the Pharmaceutical Society of Great Britain, represented the Society at the British Industries Fair banquet, held on February 18 and referred to on another page of this issue.

MR. G. S. V. WILLS, Ph.C., 86 Rodenhurst Road, Clapham Park, London, S.W.4, founder and late principal of the Westminster College of Pharmacy, London, S.W., celebrated his 80th birthday on February 14.

## Information Department

### INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated

H/142. Diadermine	M/192. Marine soap
B/192. Hamoglycogen (Chap. pell)	A/162. Rectosol
B/192. Idolifon	M/142. Therapine
	S/192. Wearwell finger stall



## Observations and Reflections

By Xrayser III

### A Conversazione

has long been overdue at No. 17 Bloomsbury Square, as there have been so many important developments there of which it was difficult for members to gain an adequate idea while dependent entirely upon published information. Your account of the various exhibits (*C. & D.*, February 16, p. 191) shows that the Pharmaceutical Society is in the van of progress so far as modern methods of investigation are concerned, and it must have come as a revelation to many of the hundreds who accepted the Council's invitation to find how wonderful are some of those methods. I was personally interested to note that, while work in pharmacology and biochemistry is being vigorously conducted, the older research departments are not being neglected. Research in pharmacognosy and, more important still, in pharmacy are of the greatest importance to us; and I should be sorry to find that investigations in those two subjects were not receiving at least as much attention at our Society's headquarters as the newer and, for the time being, more sensational fields of research. It may not be out of place, by the way, to suggest that a display on similar lines might well be made an annual event.

### Trinidad and Tobago

provide in their turn thought-compelling ideas which have an obvious bearing on the subject discussed of late in your columns under the heading of "the need of the day." Mr. Henry Joseph, speaking of the future of pharmacy (*C. & D.*, February 16, p. 189), stated that "there is only one source of hope for the druggist on the business side—only one source to which he can turn—and that is himself. On the professional side legislation can help the practice of a profession, not as a right, but as a privilege. A stream can rise no higher than its source, and the stream of pharmaceutical effort, to alleviate undesirable business conditions in the field of pharmacy, can rise no higher than the source of well-directed effort put forward to attain that end." These are true words, and the ideas they convey are perfectly sound. Educational qualification, as pointed out by Mr. Joseph, is not alone sufficient to ensure success in our business; discipline and conduct are also essential matters for consideration. And so we find opinion in Trinidad and Tobago coinciding with that prevailing in France.

### One Thing Needed

when considering undesirable business conditions in pharmacy is reflection upon the point that there are many more non-proprietors than proprietors in our ranks. There are now more than twenty-one thousand persons registered in Great Britain as chemists and druggists, while there are probably fewer than nine thousand places where the business of a chemist and druggist is being conducted in its entirety, under conditions required by the law. Obviously, therefore, the number of individual proprietors cannot greatly exceed eight thousand, if it is not below that number, so that the majority of qualified persons must be assistants or managers. What are the views of all those pharmacists regarding "the need of the day"? So long as a large number of them are content to work for limited companies and co-operative societies, they must remain a source of weakness to individual proprietors and be injuring their own prospects of success in business if ever they should decide to take the plunge and go into business on their own account.

### Congratulations

are due to Mr. William Bennett on his victory in South Battersea, and we ought also to congratulate ourselves on securing representation in the present Parliament. No doubt this does not count for so much as it might, in view of the fact that there must be a new Parliament within the next few months; but it is all to the good that it should have been shown to be possible for a pharmacist to win an election, and we must hope that

Mr. Bennett will again succeed at the general election, and then find himself supported by other pharmacists. That Mr. Rowsell should have been adopted as a prospective candidate in his own county of Devon is another encouraging item of news, and I shall hope to hear of other pharmacists entering the lists in due course. Whatever may be their particular brand of party politics, we shall be all the better off when we have several men in Parliament with a first-hand knowledge of our difficulties, able and willing to state our case on any particular point that may arise, and recognised by the rest of the House as experts on all matters affecting the business of chemists and druggists.

### An Opportunity

has been lost, as you say (*C. & D.*, February 16, p. 202), to secure a relic associated with John Keats. It would seem that on the occasion of such a sale as that of lumber from the establishment where he is said to have used the table, an opportunity also arose when the identity of the particular house in which Thomas Hammond lived could have been established. Of course, this may have been done recently, but I have not met with any statement of the fact. John Keats's associations with the City were very close. Born in Finsbury Pavement, his only fixed residences out of London were with his mother and his master, Mr. Thomas Hammond, surgeon, at Edmonton, and his last short sojourn in the Piazza de Spagna, Rome. His apprenticeship with Hammond, who lived in Church Street, Edmonton, was for five years; but he quarrelled with his master and completed only four years. He then proceeded to carry on his medical studies at Guy's and St. Thomas's Hospitals, which at that time were situated on opposite sides of St. Thomas's Street in the Borough. The details of Keats's medical career can now be followed with a considerable amount of certainty. In the anniversary year of his death (1921) Sir George Newman published a brochure entitled "John Keats: Apothecary and Poet," in which he gave additional facts which are interesting as providing precision where some matters were previously obscure. The domicile in St. Thomas's Street was the shop of a tallow chandler named Markham. From there Keats removed to live in the Poultry, with his brothers, over a passage.

### Thomas Hammond

was an apothecary of the old type. Sir George Newman describes him as such quite explicitly. There is no excuse for considering him as a chemist beyond this fact—that practically all apothecaries at that time kept an open shop. An excellent picture of the practice and equipment of those old apothecaries is to be found in a book called "On the Education, Character and Practice of a Surgeon-Apothecary," by James Lucas, published in 1801. John Keats also became an apothecary. Sir George Newman says it is believed that his premium of apprenticeship was £210 and that he was "articled to serve his master faithfully. . . . The apothecary on his part was covenanted to teach his apprentices how to prepare and sell plaisters, pills and ointments and how to treat his patients." Keats was a student at the anatomy lectures of Mr. Green, and in his second year in the hospital he became surgical dresser to Mr. Lucas. At that time Sir Astley Cooper was the most famous surgeon at Guy's; he had been there about fourteen years and was the "dominant figure in his profession." He must have taken considerable interest in Keats, because it was he who introduced his pupil to two fellow-students with whom Keats lodged in St. Thomas's Street. In the following terms Sir George Newman summarises the final stages of Keats's medical career:—"Keats was a zealous student, but whilst he drank in these truths his heart was elsewhere. . . . In July 1816 he went up for the examination for a licentiate at the Apothecaries' Hall and passed with credit. The new Apothecaries Act of 1815 had just come into operation . . . and Keats was one of the first candidates to submit to and be successful at the new examination. . . . His qualification as an apothecary ended the medical chapter of his life. It began his duty of superb alchemist."



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## Editorial Articles

### The Nutritive Function of Iodine

UNDER the auspices of the Medical Research Council, Dr. J. B. Orr and Dr. Isabella Leitch have compiled a monograph with the title "Iodine in Nutrition: A Review of Existing Information" (Stationery Office, 2s. 6d.). The unsigned preface appositely remarks that it has usually been taken for granted that the mineral constituents of food are normally supplied in due amount and variety. A gratuitous assumption of this kind is, as a moment's reflection will indicate, quite misleading: the probability is that "the physiological value of a diet may turn upon 'the infinitely little' in respect of its mineral constituents no less than in respect of its 'vitamin' or other organic factors." The historical survey of research in the physiological aspects of iodine is adequately conveyed within the compass of five pages: two of the principal landmarks noted are the work of Chatin, a professor of pharmacy in Paris in 1850, and Baumann's discovery of iodine in the thyroid gland in 1895. The review proceeds to give data of the distribution of iodine in nature. Chatin found that all arable soils contain iodine, and his discovery has been confirmed in recent years by a large number of soil analyses made by different investigators. The amount found in soils varies from about 600  $\gamma$  to about 6,000  $\gamma$  per kilogram, with occasional extension outside these limits. Plants have a great power of concentrating iodine. An experiment carried out at the Rowick Institute with pea seedlings last year showed that at the end of fifty days the plants had a concentration of 400 times the original iodine content. The report gives a useful table of the proportions of iodine found in different fertilisers; it appears that the natural substance richest in iodine is Chile saltpetre. Fresh river water contains varying amounts of iodine, and typical figures are given by Dr.



Orr and Dr. Leitch. Samples of pasture and of fresh vegetables vary considerably in this respect. The highest figure for England is 500  $\gamma$  for Romney Marsh pasture, and the lowest 21  $\gamma$  for a Derbyshire sample. Carrots, wheat and other vegetable specimens vary similarly. Turning to the animal kingdom, the amount of iodine in thyroid has been estimated at a maximum of 0.13 gm. per 100 gm. dry weight. The administration of potassium iodide to fowls and to pigs resulted, as might reasonably have been expected, in an increase of about 100 per cent. in the iodine content of the thyroid in the case of fowls, and in the case of pigs of nearly 400 per cent. The effect of iodine on plant metabolism and on animal metabolism depends on several factors, such as the form in which administered, dosage and individual reaction to stimulus. For the details of illustrative experiments we must refer our readers to the report itself—which, incidentally, has the unusual merit of an entirely readable style—but one or two typical findings may be given.

Stoklasa found that the activity of an oxidising enzyme concerned with the metabolism of oxalic acid in the plant is accelerated by iodine. He considers, therefore, that iodine plays some part in the breakdown of organic acids in the plant. This function is of importance, since the accumulation of organic acids depresses enzyme activity, and leads to destruction of chlorophyll. . . . Brenchley has shown that iodine increases the assimilation of nitrogen in mustard and barley. . . . McAskie (1924) recorded that he has been struck by the marked improvement in appetite and the putting on of flesh following administration of syrup of ferric iodide to children, and Kenneth Fraser (1925), working in a goitre area in Cumberland, stated that, after iodine treatment "in practically every case . . . a marked improvement in health and physique, a gain in weight, in energy and in working capacity" results.

The authors proceed to compare the effects of iodine and thyroid secretion on growth. They find that lack of either will result in subnormal growth, adding that possibly the action of iodine in this respect is indirect, consisting in merely supplying a necessary constituent for the favourable functioning of thyroid secretion. The ill effect of excess of thyroid is not, however, due to the iodine contained in the thyroid secretion. Experiments instanced by the authors demonstrate the fact that regulation of the basal metabolic rate is a main function of the thyroid. The administration of iodine, at any rate in exophthalmic patients and in rats, lowers the basal metabolic rate. Several pages of the monograph are devoted to a discussion on goitre and its treatment, and the authors afterwards deal with iodine requirements in animals. This, though briefly treated, is a subject of possibly equal interest with those that have preceded it. Dr. Orr and Dr. Leitch are of opinion that not only has no standard dosage for animals yet been determined, but that the doses recommended by different workers vary widely and are probably all needlessly high. They draw the inference that the normal daily intake of iodine for a cow, for example, varies between 3 mgm. and 30 mgm., and that sheep on grass ingest from 400  $\gamma$  to 200 mgm. daily, and on turnips with hay and concentrates about 120  $\gamma$  in the same period. Finally, they estimate that the minimum amount of iodine required for equilibrium in a male adult is about 15  $\gamma$  daily, and in a child about 50  $\gamma$ . The first of the authors' two appendices gives the analytical methods of Kendall as modified by Kelly and Husband, and of Von Fellenberg as modified by Leitch and Henderson, for the estimation of iodine. The other appendix, extending to fourteen pages, gives the iodine content of foodstuffs and other substances, and the authors' account of their subject is completed by an extensive bibliography and two indexes. We commend this careful presentation of the existing state of knowledge on a highly important subject to research workers, and, indeed, to everyone who takes an intelligent interest in plant and animal metabolism.

## The Iodine Industry

THERE is always a glamour about iodine and its history which never fails to interest, and a useful monograph compiled by the Imperial Institute (H.M. Stationery Office, 6d. net) was recently added to the literature of the subject. Particulars are given of the sources, uses, and methods of extraction and purification, together with statistics of production and consumption. Dealing with the uses, the following passage occurs:—Even if iodine came into more general use all over the world for these and kindred purposes, the amount consumed would be small compared with the potential production of iodine in Chile alone. To increase consumption, outlets would have to be found for iodine in chemical or metallurgical industries, including perhaps many purposes for which bromine is now used. For its use on a large scale in industry the price of iodine would have to be considerably reduced, and this depends on the general adoption in the Chilean nitrate industry of large-scale methods on modern lines. The extraction from seaweed and caliche, supplemented by electrolytic methods and the methods of final purification, are given in the pamphlet, which deals with the commercial side in the following terms:—Before the control of the industry by the Chilean Association and the International Combine, sales were effected by the different producers individually, and considerable fluctuations in price accompanied by much speculation were common; but after control was established, prices for Chilean crude iodine became more regular, as will be seen in the following table by comparing the prices before and after 1884:—

Year	Price (per oz.)	Year	Price (per oz.)
1841 .. ..	3½d.	1884 .. ..	9d.
1845 .. ..	25½d.	1894 .. ..	7½d.
1871 .. ..	about 26d.	1904 .. ..	8½d.
1882 .. ..	5d.	1919 .. ..	12d.
		1927 .. ..	12d.

The present price of 1s. per oz. is maintained, and little reduction is likely to take place until a greater demand is created. The Association of Iodine Producers in Chile, consisting of members of the Association of Nitrate Producers in Chile, was formed in 1923, and has been a corporation of legal standing under Government approval. In the period 1878-1880 it existed as the Iodine Combine, which was continued in a reconstructed form from 1880 to 1923. Its objects have been to increase iodine consumption; to consolidate the interests of iodine producers; to look after the interests of associates in the selling of iodine; to work in unison with producers outside Chile and help to forward the progress of the industry. The amount of iodine or quota which is allowed to be produced at each nitrate plant is determined by its nitrate producing capacity, and shipments must be made according to this quota, which is a means of regulation of output and of prevention of overstocking of the market. The international Combine, which is composed of the Chilean Association and the Scotch and French producers, arranges sales and deliveries of iodine to the world and determines the proportions of production allotted to the Association and to the European producers. Stores of iodine are kept at different centres in the world from which it is distributed, industrial users being allowed fixed discounts. The Chilean Association is represented in London by the Iodine Subcommittee of six members, of whom five are its direct representatives, whilst the sixth serves on behalf of the consignees. The iodine industry is thus strictly controlled, but there has been much opposition to the existence of this monopoly, and it has been claimed that with an increased production



by modern methods, and with a consequent lowering of price, the demand for iodine would increase. In this connection the Chilean Government, after consultation with the Association, has recently passed various statutes which have modified the hitherto existing arrangements. It has appointed three directors to take part in all business of the Association; it may at any time declare iodine production to be a State monopoly and control its export. At the present moment the existence of the Chilean nitrate industry, and consequently that of iodine production in Chile, is threatened by the severe competition from the synthetic nitrogen fertiliser industry and from increasing costs of fuel, labour, etc., and it can only survive by the general adoption of modern methods of technology, in addition to, perhaps, a less onerous export duty. The imports (less re-exports) and domestic exports of iodine and iodides, including ethyl iodide and potassium iodide, for the United Kingdom have been:—

Year	Imports (less re-exports) in lbs.	Domestic exports in lbs.
1920 .. ..	462,103	192,028
1921 .. ..	571,978	127,260
1922 .. ..	24,445	178,037
1923 .. ..	344,558	120,232
1924 .. ..	1,010,164	174,999
1925 .. ..	915,022	121,433
1926 .. ..	1,543,785	91,692

In Chile there are about 150 nitrate-producing plants, owned by eighty different owners, the total capacity being 3,000,000 tons a year. Owing to a slump in the Chilean saltpetre market almost all the plants were closed down at the end of 1926, but a revival in the industry, beginning in April 1927, as a result of permission for freedom of sale of nitrate, has led to the re-opening of a number of them. The exports of iodine from Chile in 1924 were 1,303,437 lb., and 1,911,511 lb. in 1925. The United States took 1,254,011 lb. in 1919, but this was abnormal, and the average is about 300,000 lb. per annum. The exports from Japan in 1926 showed a marked increase at 64,324 lb. An agreement was recently made by the Chilean Treasury with the Association of Iodine Producers in Chile to the effect that as from June 1929 sales of iodine are to be made exclusively under Chilean auspices. The severe governmental criticism has resulted in a reorganisation of the iodine industry in Chile, and research work is being carried out with a view to finding fresh outlets for the product.

### Lemon Oil Adulteration

In our issue of February 2, p. 134, we drew attention to the question of machine-made lemon oil and its inferiority to the hand-pressed product. In the correspondence columns of this issue Mr. E. J. Parry corroborates our statements and discusses the gross adulteration which is now being practised with this essential oil. Apart from the presence on the market of machine-made oil, it is quite well known that one can buy what is described as "lemon oil" and having the B.P. figures, at 2s. per lb. below the price at which reputable exporters of genuine hand-pressed oil will sell. We have already explained that it is a perfectly open secret that many tons of lemon terpenes are absorbed in Sicily, and that quantities of lemongrass citral are being imported into the island. It seems quite definite that genuine hand-pressed oil is going to be very scarce this year, for the demand for fruit has been good up to the present. The future now depends on the prospects of the Californian groves, for should their fruits be damaged by frost the production of Californian oil will be increased while the fruit merchants will be forced back on Sicily for their supply of fruit. Should this take place, the eventual result

will be a still greater shortage of Sicilian oil opposed to a good yield of Californian oil. The key to the future position, therefore, lies in the American purchase of fruit in Sicily during March and April. Without championing one side or the other, it seems to us inconceivable that the Italian authorities should not take adequate steps to stop this harmful departure concerning an industry which means much to Sicily. They would be well advised to remember that the cultivation of lemons is being pushed forward in other countries which may easily become serious competitors for the world's supply, and that adulteration ultimately drives consumers away. We must hope that the buyers of lemon oil in this country will make a determined stand against this wave of sophistication, and as our correspondent remarks, remember that "figures are, subservient to the nose." Cheapness in essential oils is more of a folly than in any other class of products.

## Business Changes

Mr. J. B. HOWARD, chemist and druggist, is opening a business at 237 Torquay Road, Paignton.

Mr. A. E. E. READ, chemist and druggist, is opening The Modern Pharmacy, 21 Wensum Street, Norwich.

Mr. D. L. CARTER, chemist and druggist, who for the past two years has been the secretary of the Bradford and District Branch of the Pharmaceutical Society, has opened a pharmacy at 322 Harrogate Road, Eccleshill, Bradford.

## Wills

Mr. PETER BEATTON, chemist and druggist, of Semple & Smart, Glasgow Road, Port Glasgow, left personal estate of £7,283.

Mr. JAMES RIPPIN, of Forest Gate, E., wholesale druggists' sundriesman, left estate of the gross value of £11,186, with net personalty £9,453.

Mr. WILLIAM BRITAIN BELL, Barnstaple, chemist and druggist, who died on January 6, left estate of the gross value of £1,024 11s. 6d., with net personalty £211 5s. 8d.

Mr. HAROLD PYMAN, 14 Promenade Central, Herne Bay, chemist and druggist, who died on November 23 last, left estate of the gross value of £2,647 17s. 7d., with net personalty £1,497 8s. 7d.

Mr. ROBERT JAMES GIBSON ARMATAGE, 6 Cricklewood Broadway, Cricklewood, London, N.W., chemist and druggist, who died at Ayton, Berwickshire, on October 3 last, aged forty-four years, left estate of the gross value of £3,261 9s. 9d., with net personalty £2,323 13s. 6d. Probate of his will has been granted to his widow Mrs. Mary Johnston Armatage.

Mr. ABRAHAM LORD CRABTREE, 5 Ashton Road, Droylesden, chemist and druggist, who died in August last, aged fifty-two, intestate and a widower without issue or parent, left estate of the gross value of £2,224 15s., with net personalty £1,164 9s. 3d. Letters of administration have been granted to his niece, Miss Nancy Mary Ormerod, Llys Owain, Blaenau Festinog.

Mr. ALEXANDER McLAREN, Belle Vale Hall, Belle Vale Road, Gateacre, Liverpool, analytical chemist, managing director of the Belle Vale Orchards Co., Ltd., and formerly technical adviser to the late Sir William P. Hartley, at the Aintree Works, died on October 5, aged fifty-seven years, leaving £10,427 8s. 2d., with net personalty £8,748 6s. 11d. The will is proved by Mrs. McLaren, the widow.

Mr. SAMUEL FLETCHER, of 31 Parker Lane, Burnley, chemist and druggist, who died on May 9 last, left estate of the gross value of £4,169 4s. 2d., with net personalty £105 15s. 11d. By final decree dated July 30 last in the action Chaloner and another v. Mitchell and others, judgment having been pronounced for the force and validity of the will, probate has therefore been granted to his daughters Mrs. Mary Sutcliffe Chaloner, of Beech Mount, Pontnewydd, Pontypool, Monmouth, and Mrs. Edith Hughes Nelson, of Mill House, Woolton, Liverpool.



## BRITISH INDUSTRIES FAIR, 1929

London, February 18—March 1

THE London section of the British Industries Fair, 1929, opened at the White City, W.12, on February 18, and closes on March 1. The expansion of area referred to in our account of last year's Fair continues: it is estimated that the "streets" of stands occupy a total length of about eight miles, with corresponding demands on superficial capacity. The number of invitations sent out to home and foreign buyers is estimated at 50,000 and 150,000 respectively. A banquet in honour of the opening of the Fair was given by the Government at the Mansion House on February 18: Sir Philip Cunliffe-Lister presided, and among the distinguished visitors were the Prince of Wales and the Prime Minister. In the course of an apposite speech, his Royal Highness pointedly asked whether the salesmanship of this country was up to the standard of the workmanship of the men.

Before we proceed to record our impressions of the Fair in its various sections, the non-competitive exhibits contributed under the auspices of the British and Canadian Governments may be briefly mentioned. (Incidentally, the individual participation of Canada is a new departure.) The Empire Marketing Board is in its old position at the Wood Lane entrance to the Fair, but with an increase of exhibits. The Gold Coast exhibit includes *Khus khus* root, palm oil, bauxite and manganese ore. The Malay States are represented for the first time. A feature is made of damar; peppers, gambier, chillies, turmeric, cinnamon leaves, vetivert root and dragon's blood also catch the eye. Southern Rhodesia devotes a good deal of space to ores and asbestos, while places have been found for linseed, soya beans, groundnuts and cotton. The display representing Sierra Leone is comprehensive, but the sample of ginger is of a decidedly inferior grade. It was explained to us that the reason for the recent action prohibiting exports for a period of three years was in order to bring the quality of gum copal back to normal: the stoppage of exports will make it impossible for the natives to overtax the trees. The Government of India has taken a large stall in Section J. A small portion of the stand is devoted to essential oils, and the fact that India is the only Empire source of turpentine and resin is emphasised. Turning to the other halls of the Fair, it may be surmised that the prevalence of influenza explains the fact that, on the opening day, the paint pot was rather too much in evidence and the broom rather too little. The following paragraphs summarise the principal trade features of interest to our readers. We may repeat here that THE CHEMIST AND DRUGGIST occupies Stand K. 116, where, as announced in our last week's issue, visitors from home or overseas addresses are welcomed, and invited to make use of facilities for correspondence. Phone: Park 5681.

## Drugs, Chemicals and Proprietaries

ALBRIGHT & WILSON, LTD., devote most attention to a new silicon ester paint which can be applied to lime surfaces. A range of refined chemicals, including phosphates, is also displayed.

FREDERICK ALLEN & SONS (POPLAR), LTD., show a range of pure and research chemicals, lead chromes, fertilisers, insecticides, pure acids.

A. BOAKE, ROBERTS & CO., LTD., as usual, have a large number of exhibits related to the flavouring or colouring of foods. There are solvents, duty free ethers, essences, both vegetable and aniline colours, oleoresins, essential oils, synthetic resins, compounded perfumes, fine chemicals and the permitted phosphates for use as food preservatives. A new line is the powdered malt extract with a diastatic power of 100. Phosphates and sulphites form a separate group, and a prominent position is given to sulphonated oils for use in emulsions, with various grades of saponins.

BOOTS PURE DRUG CO., LTD., have a representative and well-balanced display of their various types of products in charge of Mr. G. Baty-Scott, who, when the C. & D. man first called, was surrounded by inquiring visitors. The range of this exhibit extends from fine chemicals (under which term we may include research chemicals) to packed goods, and includes many pharmaceutical products which have established a position for themselves in therapeutics. Among these we may select for mention insulin, liver extract, hexyl-resorcinol, acriflavine, pituitary extract, and sterile solutions for injection (viules). Another prominent feature of the stand is saccharin (in bulk and in tablets), and there are numerous varieties of compressed tablets for hypodermic and analytical purposes.

The stand of BRAND & CO., LTD., is designed in the style of their original premises in Mayfair in 1835. Products for invalids as Brand's essence of beef, chicken, meat juice, calf's foot jelly are prominently displayed.

THE BRITISH AROMATIC CHEMICAL WORKS specialise in perfumery materials, and on show there were a range of synthetics and isolates, as well as the natural essential oils. The front of the stand is rendered attractive by an array of billets of sandalwood specially sent over by the Mysore Government.

The stand of THE BRITISH DRUG HOUSES, LTD., occupies a prominent position in Section K, and was in charge of Mr. T. Tusting Cocking, B.Sc. The feature of the exhibit is Radiomalt. Exhibition cases show the evolution of Radiomalt from raw materials (the extraction of vitamin A from liver, vitamin B from seed germs and yeast, and vitamin D production by irradiation of ergosterol prepared from yeast). Charts, curves and photos show the effects on rats of vitamin deficiency in diet. Medicinal specialities include Caprokol, S.U.M. 36, S.U.P. 36, Caprokol Antiseptic Solution S.T. 37, antimony potassium tartrate (lead free), B.D.H. ether, which is constantly being improved by research, Shadoform, liver extract and insulin. Charts show stages in the synthesis of thyroxine. A complete range of microscopic stains is exhibited. A section of the show is devoted to soil-testing outfits, a new introduction being an outfit for testing the acidity of soil on golf courses. Indicators for PH work are displayed, and new oxidation-reduction indicators. Rare research chemicals include thallium.

JAMES BURROUGH, LTD., have a tempting display of cordials, liqueurs and other portable liquids, together with more strictly pharmaceutical specimens in the shape of absolute alcohol and spirits of wine.

W. J. BUSH & CO., LTD., show a complete range of essences, harmless colours for foodstuffs and B.P. tinctures. The centre of the stand is occupied by a model of an essential oil still of 1850. Oil of orange and oil of lemon are shown, and concentrated fruit juices. Cream of tartar in kegs is on view. Messrs. W. J. Bush are showing for the first time a series of liquid floral absolutes which included rose, jasmin, cassie and violet. Esters for perfumery and flavouring are shown and included amyl cinnamic aldehyde for use in honeysuckle, sweet pea and jasmin odours. Synthetic vanillin 100 per cent. and coumarin crystals find a place on the stand.

F. C. CALVERT & CO. give a principal place in their exhibit to the carbolic series for which they are famed—the acid itself in various grades, the soaps, the dentifrices and the ointments. Allied chemicals make up the balance of a neat display.

SPENCER CHAPMAN & MESSEL, LTD., show specimens of fuming sulphuric acid, sulphuric, hydrochloric and nitric acids and battery acid.

THE CROMESSOL CO. (Mr. J. Crombie, Ph.C.) have made an attractive display to call attention to the floral nature of their disinfectant, Cromessol. This consists of essential oils and formalin, and is a line which chemists should find a rapid and profitable seller at the present time for spraying in sickrooms, offices, cinemas and other buildings. The household outfit consists of a sprayer and solution (diluted with water for use), while refills are available.



THE GRAESSER-MONSANTO CHEMICAL WORKS, LTD., have submitted a proposal on vanillin to the Empire Marketing Board and the reply closes with the remark: "... would be glad to draw the attention of customers to the importance of the clove industry to Zanzibar and to enlist their interest in maintaining production." Other features of the exhibit are saccharin, Aspirgram, Acrosyl (a lysol containing 50 per cent. cresols), and a fine specimen of salicylic acid crystals, together with a range of phenol and cresol derivatives.

HOPKIN & WILLIAMS, LTD., show a selection of chemical reagents for analytical and research purposes and reagents to A.R. Specifications. Other products for use in research work are: Adipic acid, hydrazine hydrochloride, potassium hydrogen phthalate, glycine, dimethylglyoxine. Indicators for PH determinations are featured and solutions for mineral separation for geological research. On a section of the stand is a collection of radio-active uranium bearing minerals and products, as sodium uranate, uranium nitrate. Sodium bismuthate for estimation of manganese in metallurgical assay is shown. Other products include manganese borate, cobalt acetate used in paint and varnish manufactures, barium sulphate for x-ray work and Siva rouge for optical and scientific instruments. The company has just published a new price list of fine chemicals for analytical and laboratory use, a copy of which can be obtained on application. HOPKIN & WILLIAMS (TRAVANCORE), LTD., show a collection of rare-earth minerals, the most important being Monazite sand. Other minerals are Ilmenite sand and Zircon sand, obtained in the separation of Monazite sand. Products of Ilmenite (titanate of iron) are titanium oxide, which replaces white lead in paint, pure metallic iron free from silicon and titanium.

HORLJCK'S MALTED MILK CO., LTD., as would be expected, are giving considerable prominence to the new chocolate-flavoured malted milk (*C. & D.*, February 9, p. 165) and the mixer. A soda fountain had also been installed and "free drinks" were to be available, an offer which, in view of the low temperature prevailing in the building on the opening day, would be welcomed alike by co-exhibitors and visitors. The rusks made by the company are now available in two new packs.

HOWARDS & SONS, LTD., have a typical "Howards" exhibit of well-selected and attractively varied chemicals, together with such more recent departures as packed aspirin tablets and counter packages of familiar salts. A prominent position is given to Messrs. Howards' ether, and among the fine specimens displayed are those of camphor, bismuth salts, iodides, mercurials and, it need hardly be added, quinine. Avantine and other solvents are additional features of a many-sided collection.

The largest exhibit in Section K is that of the IMPERIAL CHEMICAL INDUSTRIES, LTD., who have three large stands. The exhibits consist of illustrations of those industries in which the products of the I.C.I. are used, and include acids, alkalis and heavy chemicals, artificial leathers, cellulose preparations and lacquers, explosives, fertilisers, synthetic dyestuffs, non-ferrous metals and cement. A Pulsen Chloronome is shown for the sterilisation of water by means of gaseous chlorine, and several models illustrate industrial plant.

IRVING'S YEAST-VITE, LTD., have selected a corner stand, at which they may easily attract a large share of passing visitors. Their tablets are skilfully displayed, and pamphlets lie ready to hand.

ERNEST JACKSON & CO., LTD., have a useful display of their lozenges, pastilles, tablets, Glossettes and other products, arranged with salesmanlike art so as to attract the passer-by.

JOHNSON & SONS, MANUFACTURING CHEMISTS, LTD., have two stands, one in the Chemical Section and the other in the Photographic. The displays comprise British-made photographic chemicals packed in sizes suitable for retail and in bulk quantities. Referring to the first of this season's flashlight competitions (which closed on January 31), the company inform us that over 50 per cent. of the entries were enlargements, and further that quite a large proportion of the competitors have realised the value of Azol for keeping the results of flashlight exposures free of hard contrasts. The closing date of the next competition is April 15.

THOMAS KERFOOT & CO., LTD., have a comprehensive display of their products, including Vapex, Mineral Spring, Sterisalt, Zone Salt, pastilles, cachous, Kerocain anæsthetic, Castols, Distols and Zone brand tablets and pharmaceuticals. A feature of the stand is the Vapex illuminated sign and the advertising matter for Vapex, printed in a number of foreign languages, European and Oriental.

MAY & BAKER, LTD., have a large and effectively arranged stand suggestive of big business. A feature is made of many of their organic chemicals, some of which are relatively new. There is, for example, metarsen-argentum, prepared for intramuscular or subcutaneous injection, and already favourably reported upon in treating disseminated sclerosis; there are also parosan, stovarsol, quinine troposan, bisglucol, arthyrin, cardyl, opacin and crisalbine, the uses of which are to be learned at the stand by those who are not already familiar with them. Mention should also be made of mercurochrome, soneryl, acriflavine and organic arsenic products such as metarsenobillon and tryparsamide. Of chemicals manufactured and sold on a larger scale Messrs. May & Baker have on view ether, bismuth salts, iodides and many others which it is not easy to classify as fine or heavy.

MENLEY & JAMES, LTD., devote the bulk of their display to tablets, pills, and food-adjuncts manufactured and packed for all markets. A wide range of tablets for chemists' own name trade is also exhibited. Photographs show tablet punching machines and coating apparatus. A wall-card calls attention to Iodex.

THE MOND STAFFORDSHIRE REFINING CO., LTD., exhibits Monsol, the non-caustic and non-irritant germicide and its various preparations, including liquid, pastilles, ointment, capsules, anti-mosquito sticks, dental creams. Veterinary preparations include capsules, ointment and shampoo.

THOMAS MORSON & SON, LTD., show samples of bismuth salts and potassium iodide crystals. Several grades of creosote are exhibited made to different specifications and for different uses, including Morson's Kreosote. Pexuloid, a treated fabric to take the place of splints, etc., is exhibited, and some surgical appliances made from it. An interesting feature of the stand is the collection of old invoices and the old pharmacy jar.

SOUTH METROPOLITAN GAS CO. have achieved the well-nigh impossible in the artistic treatment of a gasometer (not, of course, of the largest size) as part of their scheme of decoration. They are showing a full range of chemicals derived from or associated with coal gas.

STEVENSON & HOWELL, LTD., display Red Ball brand essences for the food manufacturing industries, aerated waters, fruit syrups and cordials, etc. Essential oils and colours for food products are shown.

THOMPSON & CAPPER, WHOLESALE, LTD., have devoted the major portion of their exhibit to Mothaks, a moth preventive tablet arranged for attaching to coat-hangers.

THOMAS TYRER & CO., LTD., have a representative collection of their well known Sterling brand of fine chemicals. About two hundred different products are exhibited, and it is therefore impossible to give a detailed description, but it is safe to say that every industry or trade is catered for. Sections of the display are devoted to photographic chemicals, ceramic chemicals, and among the pharmaceutical chemicals we noticed bismuth salts, bromides, citrates, ethers, phosphates and refined reagents for analytical work.

WHIFFEN & SONS, LTD., have a stand, under the supervision of Mr. S. Jamieson, filled with interesting specimens of fine chemicals. Prominence is naturally given to Staniform and its preparations—i.e., ointment, dusting powder, glycerin-water solution, alcoholic tincture and spray in liquid paraffin. Our representative learned that not only is Staniform obtaining "full marks" among the medical profession, but that it is also to be introduced in due course to the wider public, among whom big sales are made. Messrs. Whiffen distribute a handy brochure on the medical uses of this product. Among other fine chemicals on view at the stand are a full range of mercurials (including vermilion in several shades), quinine salts, potassium salts, caffeine, and prunella balls in many sizes and colours.



WHITE, TOMKINS & COURAGE, LTD., display a complete range of essences and concentrated fruit juices. Terebene is a line recently added to the list, and of the other exhibits peppermint oil is featured among other essential oils.

WILLIAMS (HOUNSLOW), LTD., show dyes and stain for all purposes, including leather, polishes, varnishes, nitro-cellulose lacquers, soaps and inks. Nigrosine (water, spirit and fat soluble) is the feature of the exhibit. "Spirisol" dyes, soluble in spirit but insoluble in water, for paper-bag printing, have been introduced. Guaranteed colours for foodstuffs are displayed, and colours for toilet soaps, face powders.

Among others exhibiting in this section are:—ANGELO BROS. (ENGLAND), LTD. (shellacs); ANGLO-AMERICAN PHARMACEUTICAL CO., LTD. (Huxley's Ner Vigor Tonic, Tubelette Menthol and Wintergreen Cream, Wintogeno, Sal Antisepticus, etc.); BARIUM CONSOLIDATED, LTD.; BARNARD'S MASCOT (pocket inhalant); THE BRITISH CYANIDES CO., LTD.; BROTHERTON & CO., LTD. (dyes, intermediates, etc.); THE GENERAL CHEMICAL AND PHARMACEUTICAL CO., LTD. (analytical and research chemicals, etc.); HICKSON & PARTNERS, LTD. (dyes, intermediates, etc.); L. B. HOLLIDAY & Co., LTD. (dyes).

#### Toilet Preparations and Requisites

ADDIS & SON have, as usual, a comprehensive selection of bone-handled and celluloid-handled tooth-brushes, skilfully arranged. There are also to be seen at the same well-placed stand dental plate brushes, nail-brushes, corn rasps and other items.

ALLWOOD BROS. have, as usual, a stand artistically decorated with carnations, which, as most people know, are closely connected with their perfumes. Other features of a display that may fairly be called unique are skin foods, soaps and pomades.

ARTHUR BERTON, LTD., show a range of rubber-proofed textile goods comprising sponge-bags, holdalls, air cushions, camera cases, overalls and aprons.

T. F. BRISTOW & Co., LTD., have a distinctive exhibit of their well-known series of toilet preparations—e.g., Ambré Divin and Rose of England. These, together with soaps, lavender water, eau de Cologne, face powders, and so forth are displayed in such a way as to appeal to everyone who appreciates bright colours and artistic packings.

THE BRITISH XYLONITE CO., LTD., have a striking display of high-class toilet articles—e.g., manicure sets, hair brushes and mirrors—in several colours. The company seems to have attained perfection in the refinements in finish that it has evolved.

BUTLER & CRISPE have confined their display to sponge bags, hold-alls, powder puffs and allied articles, and in this way are able to offer the visitor a wide range to choose from. A type of sponge bag which is a particularly attractive line is made of silk, is fitted with a lightning fastener, and the interior has waterproof pockets of different shapes and sizes—a distinct advance over the old-time rubber check bag. There are puffs to suit all "purses," and those in search of a pleasing, yet inexpensive article, will find it in the hand-painted handkerchief ones—a line to bear in mind during the coming months. Many chemists do a considerable business in bath caps, and there must be few who will be unable to sell the household set of dust or bath cap, apron and sleeves in a waterproof fancy art silk.

THE BUTYWAVE Co. are showing an extensive range of their well-known toilet goods, which are displayed to full advantage. Among these may be mentioned Butywave hair tonic, Butywave shampoo, Henna Barettes, Parfum, Butywave, and brilliantine, the virtues of which were being expounded to interested listeners at the time of our visit.

CUSSONS, SONS & Co., LTD., have excelled themselves in the *décor* of a well-devised stand. The Mists of the Moon series of perfumery occupies, perhaps, the place of honour; and among other popular lines we noticed White Cross baby powder, Kervalli brilliantine and the Maydew toilet preparations. This stand occupies an island site, and should attract custom.

ENOLIN (1926), LTD., show their series of toilet products—tooth paste, dentifrice (solid), tooth powder, shaving cream, toilet soap, shampoo powder, vanishing cream and denture powder. The preparations are nicely packed, and the wholesale prices are competitive.

THE ERASMIC Co., LTD., have a new stand depicting the Traitor's Gate in the Tower of London, the features of which are two ravens and an imitation moat with water in it. A humorous result of the prevailing arctic conditions was the absence of water from the "moat" owing to a frozen water supply.

FAUDEL'S, LTD., who are well known in the City in another sphere, have made their appearance as manufacturers of Gainsboro perfumery, the Rose Parfaite series, and a considerable list of other toilet preparations. More will probably be heard of these perfumes.

FREERS MANUFACTURING Co., LTD., have a well-varied display of toilet goods covering practically the whole range of articles comprised under that heading. Among these are to be found shaving sticks, dental creams, brilliantines (liquid and solid), shampoo powders, and toilet preparations of lysol.

J. GROSSMITH & SON, LTD., show perfumes, fine soaps and toilet requisites of all descriptions. A feature is made of Parfum Jasmin, a recently introduced series of soap, perfume, powder and bath crystals. Bath crystals, in a variety of perfumes, are displayed. A section of the stand is devoted to Old Cottage lavender preparations. Phul-Nana, Shem el Nessim, Tsang Hiang perfumes, etc., are shown.

G. B. KENT & SONS, LTD., have a tasteful array of brushes for all purposes. In hair and tooth brushes there is a large variety to suit all requirements.

FRANK MOUSLEY has usually something novel to introduce to the visitor, and among the innovations this year is a Telecompact and Flora. When closed the former resembles the ordinary compact-powder case, but it opens into three sections, of which the centre one containing a solid perfumed germicide fits on a telephone mouthpiece, and another contains a mirror. As the compact can be carried in the handbag without the antiseptic odour escaping this is an article which should make a special appeal to the ladies. Flora is a perfumed germ-proof mouthpiece which fits on to telephones and speaking tubes. Refills or plain pads for the user's own perfume can be supplied. Mr. Mousley is also making a stitchless vanity pad, another accessory which the ladies will appreciate, since being stitchless (it is made by pressure and has a beaded edge) it is also "scratchless." In addition to puffs of all descriptions, notably the Sun-Ray, which after being sterilised with ultra-violet light, is sealed in a transparent container and then packed in an attractive outer, the firm also supplies in bulk or small quantities face powder.

ROBERT W. PHILLIPS, LTD. (with whose exhibit are included those of THE LAVODENT Co., LTD., and THOMAS TURNER & Co. (SHEFFIELD), LTD.), have a varied display of toilet and household goods, from medicated soaps and the Dentiliser tooth-brush to hat dyes and varnish stains. Royal safety razor blades occupy a prominent place.

RELIAANCE RUBBERWARE, LTD., have a striking display of seamless moulded rubber articles. Those of particular interest to pharmacists are hot-water bottles, bathing caps and other items in daily demand; but the display is also worth a visit from the point of view of adding possible side-lines.

R. J. REUTER & Co., LTD., have one of the finest displays of perfume sprays any visitor could wish to see—excellent both in quality and variety. The latter virtue is even greater than at first one would suppose; since all the fittings are standard and interchangeable the number of different designs which can be supplied is apparently a problem for a mathematician. As regards quality, there are some delightful examples of guaranteed hand-cut lead crystal with others of a less expensive nature, but in no instance did we see a model which would be out of place in the most exclusive business. Another feature of the sprays is the oval-shaped bulb—an advance in design which we understand the company originated.

ROBERTS & SHEPPEY display their well-known Mel Rose tablets, together with the cream, ointment and fishing paste.



**SOLPORT BROTHERS, LTD.**, have a comprehensive exhibit of toilet requisites, notable among which are Nerissa puffs, Watersprite face cloths, and Portia sponge bags, holdalls and travelling companions. There is also a display of puffs which leaves no doubt regarding the extent of the business the company (who are actual manufacturers) transacts in the article; a variety of hot-water bottle covers, of which H 14 A (in velour) is a particularly popular model; and mention must also be made of Solapads, the anti-travel-sickness belts of which Messrs. Solport are now the sole licencees and manufacturers. During the visit of the Queen to the Fair on February 19 her Majesty admired the company's exhibit and purchased two Nerissa puffs.

**SORBO BUBBER SPONGE PRODUCTS, LTD.**, have a number of articles, among which are their well-known Sorbo sponges.

**C. A. STOKES & Co., LTD.**, have their stand dressed with brillantines, hair creams, perfumery, shaving soaps, powders and Eclipsol scurf cure.

**WILLIAMSON BROTHERS, LTD.**, have been moved (owing to fire brigade restrictions) from the position they were to have occupied and are now to be found in M. 89. This move is doubly unfortunate, as not only have some of the catalogues no indication of the alteration but the frontage is about one-quarter of the amount originally allotted. This confinement has naturally prevented the company from showing anything like their full range of puffs, and from exhibiting those which are there to the best advantage. Needless to say, the exhibit is as comprehensive as possible.

Other exhibitors in this section include:—**JOSEPH CROSFIELD & SONS, LTD.** (Pyramid soaps, Verbol (vegetable oil fat), and Persil); **THE FENTON MANUFACTURING Co.** (puffs, sachets, etc.); **HINDES, LTD.** (hair brushes); **JOSHUA MARGERISON & Co., LTD.** (toilet soaps, etc.); **POWDER PUFFS, LTD.**; **SOULEX, LTD.** (safety razor blades); **H. THOMAS & Co.** (cosmetics); **THE WESTERN PERFUMERY Co., LTD.**; **G. ZAMBRA** (perfumes and toilet preparations).

### Miscellaneous

**BRITISH CELANESE, LTD.**, have arranged a highly attractive exhibit, but the product which is of chief interest to those connected with the drug-trade is the bottle-capping solution. In practice, the corked or stoppered bottle is dipped in the solution (which, by the way, is available in a variety of colours), removed, and allowed to dry. Naturally, with a quick-drying preparation, the solution as it is exposed to the air becomes in time too thick for satisfactory use, but it may be reduced to normal consistency by the addition of the thinning solution which the company supply.

**COLOUR PHOTOGRAPHS (BRITISH AND FOREIGN), LTD.**, are showing many striking photographs in natural colours. Their process will not, we understand, be available to the public for some considerable time, but it is being practised at their studios in Knightsbridge, London, S.W.1, particularly professional work and in the production of advertisements. A factory for the manufacture of the photographic materials is being erected at Acton, London, W.

**CORFIELD, LTD.**, show a selection of containers for toilet preparations, screw caps and compact boxes, in polished, wire brushed, colour sprayed, embossed and plain aluminium; also compact boxes, caps and containers in polished lacquered and relieved gilding metal.

**DAKOL ELECTRIC, LTD.**, are manufacturers of a screen which, when used in conjunction with electric light, converts it to the quality of daylight. The effectiveness of the arrangement can be judged by a visit to the company's stand; nor can there be any doubt but that such illumination conduces to higher efficiency among those who work where such visibility is attainable without eyestrain.

**THE DHAUSSY POWDER BOX Co., LTD.**, are displaying their patented unspillable powder box in a neat and attractive way. It should be noted that the address has been altered to 11 Bartlett's Buildings, London, E.C.4.

**HOUGHTON-BUTCHER (GREAT BRITAIN), LTD.**, have an imposing array of cameras, and the innovations to which our attention was called included the Mulchro shutter—

which it is anticipated will prove a formidable rival to a well-known one of foreign make; the All-Distance Pocket Ensign No. 2—an apparatus which embodies the principles of the previous model, but is covered with leather cloth, fitted with a 3-speeded shutter, and has a special film-registering device; and the Ensign Speed Film Reflex—a reflex camera with a focal-plane shutter, but with which roll film is used instead of plates.

**J. G. INGRAM & SON, LTD.**, have an extensive display of rubber goods of every kind. The useful has not been sacrificed to the spectacular, and trade buyers will appreciate the convenience of being able to see what they are looking for. As is well known, Messrs. Ingram's range comprises a large number of appliances needed in medicine and surgery, in addition to the domestic hot-water bottle and other articles in everyday use.

**J. PILLISCHER, LTD.**, give pride of place to microscopes, though, of course, such apparatus as barometers and field glasses occupy by no means insignificant positions. Microscopes have, however, always been one of the scientific instruments for which the company has been held in high esteem, and among those exhibited is one made in 1850 by M. Pillischer (the founder of the company), and shown at the Exhibition of 1851. It is interesting to note the progress made in design since that date, advances illustrated by the various models on view, and it is also a tribute to the workmanship of those days when the machinery then available is compared with that of to-day.

**THE RUBBER GROWERS' ASSOCIATION** have a large stand demonstrating the multitude of uses to which rubber is put nowadays. Of pharmaceutical interest, there are sponge bags, surgical dressings, and rubber shaving brushes.

**VISCOSE DEVELOPMENT Co., LTD.**, have a neat exhibit of their well-known bottle-caps. These are now obtainable transparent, opaque, and in various colours.

**WELLINGTON & WARD, LTD.**, have introduced a method of indicating on their roll-films how near the next film is to the position for exposure. This is accomplished by means of an arrow, which narrows as the film arrives, the point of the arrow coinciding with the number indicating that the new film is in place.

Advertising novelties, signs, office appliances and similar material are shown by the following:—**ACML SHOWCARD Co., LTD.**; **AMALGAMATED SIGNS; CASCELLOID, LTD.**; **CHANGEABLE SIGN Co., LTD.**; **THE CORRUGATED PACKING MATERIALS Co., LTD.**; **THE "ECONASIGN" Co.**; **A. D. HARRIS, LTD.** (advertising tapes); **SAMUEL JONES & Co., LTD.** (stationery, gummed and coated papers); **PNEUMATIC RUBBER STAMP Co., LTD.**; **SIMPLEX SAMPLING ASSOCIATION, LTD.**; **WILLIAM SESSIONS, LTD.** (Eupax Par seals); **TICKETS & Co.**; **UNITED SIGNS, LTD.**

Among other stands worth a visit are those of:—**A. ADAMS & Co., LTD.** (cameras); **AMALGAMATED PHOTOGRAPHIC MANUFACTURERS, LTD.** (cameras); **BAIRD & TATLOCK (LONDON), LTD.** (scientific apparatus); **THE BERKEFELD FILTER Co. (BRITISH)**; **B. BLACK & SON** (thermometers); **BOWER ELECTRIC (1926), LTD.** (ultra-violet ray apparatus); **CADBURY BROS., LTD.**; **CARR & Co., LTD.** (fisks); **A. S. CARTWRIGHT, LTD.** (aluminium boxes); **COLOUR SNAPSHOTS (1928), LTD.**; **DEAN RAG BOOK Co., LTD.** (puzzles, etc.); **ELLIOTT & SONS, LTD.** (photographic materials); **ENERGEN FOODS Co., LTD.**; **THE EVER-READY Co. (GREAT BRITAIN), LTD.** (batteries, accumulators, portable electric lamps); **T. B. FORD, LTD.** (filter papers); **E. B. FRY, LTD.** (photographic accessories); **GEM DRY PLATE Co.** (photographic materials); **HARBUTT'S PLASTICINE, LTD.**; **ILFORD, LTD.**; **THOMAS ILLINGWORTH & Co., LTD.**; **IMPERIAL DRY PLATE Co., LTD.**; **JAMES A. JOBLING & Co., LTD.** (Pyrex glassware for laboratory and other uses); **MANSELL, HUNT, CATTY & Co., LTD.** (embossed seals and papers); **MARMITE FOOD EXTRACT Co., LTD.** (Marmite); **R. H. MOORE & Co., LTD.** (Nadco dyes); **W. J. MYATT & Co., LTD.**; **NORTH BRITISH RUBBER Co., LTD.**; **ROLLS RAZOR Co.**; **ROSS, LTD.** (photographic lenses); **R. M. SCOTT (IPSWICH), LTD.** (wheatmeal digestive biscuits and malt charcoal biscuits); **THERMOS (1925), LTD.** (vacuum flasks, vacuum jugs, ice jugs); **UNION JACK PASTE Co.** (ointment for hard skin on feet); **UNITED KINGDOM OPTICAL Co., LTD.** (spectacle lenses); **VITAMINS (1928), LTD.** (Bemax); **THOMAS WARD & SONS, LTD.** (safety razor blades).



## Trade Prospects with India

CONDITIONS and prospects of British trade in India (April 1, 1927 to March 31, 1928) are discussed in the annual report issued by the Department of Overseas Trade, and published from H.M. Stationery Office, at 3s. per copy. The information given is of great value to all interested in Indian affairs as it not only covers in detail the import trade (export trade is not dealt with), but also analyses in an effective manner the trade tendencies as a whole. Members of British firms are urged to call upon the Department's representative, and it is suggested that the firm's representatives should keep in close touch with the Government officials. The year under review has been a somewhat colourless one, but is noteworthy if only for the reason that a definite check has been given to the downward trend of the British share of India's imports which had been such a marked feature of the three previous years. At the same time, systematic and carefully considered effort is required on the part of manufacturers and exporters to meet the intense foreign competition which is being experienced in almost every trade, and to cope with the many weakening factors which are the inevitable concomitant of the extension of self-government to India. The improvement in economic conditions is explained by Mr. T. M. Ainscough, H.M. Senior Trade Commissioner in India and Ceylon, as being due to (1) improved conditions in the principal markets of the world, (2) resulting stability in world prices which appear to be at last finding a post-war position of equilibrium, (3) advantages accruing from the stabilisation of the rupee, and (4) favourable conditions in the country itself. The quantitative improvement is greater than is apparent from a study of the values, inasmuch as the prices of piece-goods, etc., were on a lower level than in previous years. It is again emphasised that price is the controlling factor in Indian markets. The outstanding features of the year have been intensified American competition in toilet requisites, as well as general goods, while Germany has shipped increased quantities of dyes and chemicals among other items.

Dealing with marketing problems, the report gives really sound advice on the question of better systems which lies at the heart of the British trade position in India, and the crux of the matter is adequate representation. For the last ten years it has been consistently pointed out that the British manufacturer can no longer afford to leave the marketing of his products entirely in the hands of others, but must himself take an interest in and generally supervise the processes of selling, propaganda, and advertising, until the goods actually reach the ultimate consumer. It is interesting to note that the commissioner singles out the distribution of certain chemical products and soaps as outstanding examples of efficient marketing. It is, however, stated that the number of modern selling organisations adequately covering the country and making full use of present-day methods is extraordinarily few. Unless manufacturers are prepared to put in sales organisations themselves, or to insist that agents should maintain an efficient organisation, the risk of losing trade will be great. Further detailed information and advice, including the names of, and particulars concerning, prospective agents, can be obtained from the Indian Section of the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

Alcohol is among the items of particular interest to our readers. Of the spirit present in drugs, medicines and chemicals, the United Kingdom shipped 49 per cent., the United States 35 per cent., and France 9 per cent. Java supplies practically the whole of the denatured spirit, which is denatured at Indian Custom Houses immediately on arrival and before clearance. The total imports of chemicals and chemical preparations (excluding manures and medicines) during the last three years has been (lakhs of rupees):—1925-26, 203; 1926-27, 244; 1927-28, 265. Details with regard to the provenance of these imports are not available, but below we give a

table showing the percentage share of the principal countries of origin over a period of years:—

Country	1913-14	1925-26	1926-27	1927-28
United Kingdom ..	74.7	61.2	57.9	55.4
Germany ..	12.4	20.6	21.5	21.5
United States ..	0.3	2.9	2.7	3.3
Italy ..	5.2	3.1	5.9	6.7
Kenya Colony ..	—	1.4	1.4	1.8
Norway ..	0.5	1.8	1.7	2.6
Japan ..	1.5	1.3	1.4	1.2
Other countries ..	5.4	7.7	7.5	7.5

Both the British "Imperial Chemical Industries" and the German "I.G." are consolidating their interests, strengthening and extending their sales organisations throughout India, and are preparing for a determined bid for supremacy in this market, which is likely to become one of the most important places in the world for chemical products of all kinds. In dyeing and tanning substances the improvement of the U.K. in the share of alizarines is encouraging. The Germans, by dint of remarkable organisation in manufacturing and marketing, have completely regained their grip on the valuable aniline trade. In household and laundry soaps the British products are supreme on account of their quality and the efficient selling organisations maintained by the leading manufacturers. In toilet soaps, however, American competition is rapidly increasing, and accounted for 18 per cent. of the total in 1926-27. The statistics are:—Household and laundry soap, 364,726 cwt. in 1927-28, against 340,308 cwt. the previous year; toilet soap, 43,800 cwt., against 43,032 cwt.; other sorts showed a decline from 19,135 cwt. in 1926-27 to 13,943 cwt. last year. Foreign manufacturers appear to be more ready to meet special market requirements in the matter of shape, weight and make-up than some of their British competitors. A satisfactory advance of over rs. 8 lakhs is recorded in paints and colours. Drugs and medicines (excluding chemicals and narcotics) are enumerated under the following comprehensive headings (in lakhs of rupees):—

Description	1926-27	1927-28
Total imports of all kinds of drugs and chemicals .. .. .	1.90	1.98
Camphor .. .. .	0.28	0.26
Cod-liver oil .. .. .	1	1
Preparations of opium and morphine ..	1	1
Proprietary and patent medicines ..	27	29
Quinine salts .. .. .	26	23

Details regarding last year's imports are not yet available, but of the total trade in 1926-27 the United Kingdom contributed 41 per cent., Germany 16 per cent., Japan 12 per cent., United States 8 per cent., and lesser values for China, Straits Settlements and France. Camphor is mainly drawn from Japan, with increasing quantities from Germany. Cassia is obtained almost entirely from China. Cod-liver oil is 70 per cent. British, but imports from Holland are increasing. The trade in proprietary and patent medicines is divided between the United Kingdom (54 per cent.), Germany (15 per cent.), United States (10 per cent.), and France (7 per cent.). Of the quinine salts the United Kingdom supplied 62 per cent., Germany 24 per cent., Java 7 per cent., and the United States 4 per cent. Imports of quinine from Java appear to be steadily decreasing in contrast with those from Germany, and it is also to be remembered that a large portion of the Government requirements of quinine are now drawn from the local cinchona plantations in several provinces. In optical instruments the imports amounted to rs. 8 lakhs, and Germany is an easy first in this field. Photographic apparatus totalled rs. 23 lakhs, and Britain is holding her own in this business. Imports of scientific instruments came to rs. 22 lakhs, and the United Kingdom supplies 71 per cent. of these goods. The import of cheaper German surgical instruments is increasing steadily, but the United Kingdom still accounts for 57 per cent. of the rs. 23 lakhs imported. Germany is winning in the supply of soda water bottles, but in other kinds Japan is the chief provider.



## Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

### Local Reports

#### ENGLAND AND WALES

**Blackburn.**—At a meeting of the Insurance Committee on February 13, the question was raised as to the cost of a prescription for the supply of Malto-Ostein, and as to whether this was a proper charge on the drug fund. A member thought the preparation was a food and not a drug. Ald. Grimshaw, chemist and druggist, said he believed the question had come before the Panel Committee and they decided the prescription should be dispensed and paid for. He also thought the preparation was a food. Another member thought the Committee ought to give the prescriber the benefit of any doubt. Mr. W. H. Lightbown, chemist and druggist, said he understood a committee had been set up by the Ministry to go into the question of what articles could be supplied as part of medical benefit. Until that committee had officially reported, perhaps it would be better to meet these prescriptions. It was decided to refer the matter to the doctor for his observations. A prescription was submitted to the Insurance Committee in which a doctor ordered 36 tablets of a preparation, and the chemist supplied 100. The pricing office pointed out that these tablets were made up in bottles of 25, and they inquired whether the Committee sanctioned the supply of 100. Mr. F. Maxwell thought the chemist should have supplied two bottles of 25 tablets each. Ald. Grimshaw said there would be a difficulty if the chemist had only the 100 size in stock. It was decided to interrogate the chemist as to why the 100 bottle was supplied.—A joint meeting of the Panel and Pharmaceutical Committees decide to circularise doctors and chemists on the panel, pointing out that articles coming within the Dangerous Drugs Regulations must be written out in full, each ingredient and the amount of the drug prescribed being set out. It was decided to amend the formulas in the local pharmacopœia accordingly.

**Cornwall.**—At the February meeting of the Insurance Committee, a communication concerning a chemist who had been fined £1 1s. was received from the Ministry of Health, stating that the Committee, in coming to their decision, had in mind the discourtesy of the chemist. The Ministry held that contempt was not a breach of the regulations, and a fine could not be imposed on that ground. In regard to the error in dispensing, the error was not sufficiently grave to withhold something from his remuneration in view of the action taken by Committees in their areas, and the Minister was unable to approve of the recommended fine. The chairman remarked that even if the fine had been confirmed, the payments made to this chemist were so very small that it would take some years to liquidate the amount.

**Derbyshire.**—A suggestion that chemists should have their weights and scales tested more frequently was made when cases of discrepancy were reported to the Derbyshire Insurance Committee recently. In one sample taken, an excess of 2.3 per cent. in one ingredient and a deficiency in another were found, and a second sample showed an excess of 41 per cent. in one ingredient. In the first case the Pharmaceutical Service Subcommittee were of opinion that sufficient care had not been taken. In the second the chemist contended that every precaution was taken to ensure accuracy when weighing. It was decided to call attention to the necessity for every care to be taken in all Insurance dispensing and in storing drugs.

**Essex.**—A meeting of the Essex Insurance Committee was held on January 29. The Medical Benefit Subcommittee reported that the number of chemists' places of business on January 1, 1929, was 307, and in 1928 300. The Medical Benefit Subcommittee reported they had had before them the question as to the supply by a chemist to an insured person of luminal sodium tablets. The matter has been referred to the Pharmaceutical

Service Subcommittee for investigation. The Subcommittee had considered correspondence with regard to the supply of Varicosan bandages, and they had referred the matter to the General Purposes Subcommittee with a recommendation that the chemist should receive payment for such bandages from the Committee's own general purposes fund. The General Purposes Committee now recommended that 25s. be paid from that fund to the chemist in respect of the bandages supplied by him. They also decided that the circumstances of the supply of, and payment for, these bandages be referred to the Panel Committee. The reports were adopted. The Medical Benefit Subcommittee also reported that an Insurance doctor ordered for an insured person a supply of Chymol. He was informed that the Ministry of Health advised that Chymol was a food. The Panel Committee replied that in the circumstances they considered that the use of Chymol was a proper charge upon the fund. They added, however, that they were of opinion that in future such cases must be decided on their merits. In the circumstances, the Medical Benefit Subcommittee agreed that the cost of Chymol could be regarded as a charge against the Insurance fund.

**Middlesex.**—A meeting of the Insurance Committee was held on February 5. The chairman of the Pharmaceutical Service Subcommittee, in presenting the report, called attention to numerous complaints of carelessness on the part of chemists in dispensing. He said the Subcommittee had found it necessary to censure six chemists and to ask the Ministry of Health to deduct from the remuneration due to the offenders sums varying from £1 to £5. Cautions were administered in four cases. Referring to a case in which the Subcommittee asked that £5 should be deducted from the remuneration to be paid to the chemist, it was stated that the doctor prescribed calomel, but there was none of it in the medicine supplied. The Subcommittee were informed that the dispenser responsible for the error had been dismissed. The chairman of the Subcommittee said he thought this was a case which should have been dealt with under the Sale of Food and Drugs Act, and in that way the name of the offending firm would have been made known to the public. They were endeavouring to have the Regulations altered so that they could institute proceedings in such a case in order that the offender's name could be divulged. Dr. Brackenbury suggested that in another case it was found that the medicine supplied was a "pink-coloured liquid smelling of chloroform," but containing no quinine sulphate or hydrobromic acid, which had been prescribed. In that case the Subcommittee recommended that £3 should be deducted from the chemist's remuneration. The chemist gave something entirely different from that prescribed and the effect might have been serious. A member said that in the case referred to the chemist could not read the prescription and did not take the trouble to consult the doctor: "If chemists cannot read a doctor's handwriting," he said, "it is their duty to ask the doctor what he wants, and not to make up something else." Among the explanation of errors were: The dispenser must have used a 2-oz. instead of a smaller measure, and did not hold the measure straight; occurred in manipulation; lady dispenser could not account for the error; prescription came in the rush hour and was misread.

**Norwich.**—At a meeting of the Insurance Committee, on January 22, the Pharmaceutical Service Subcommittee reported on a complaint against a chemist. The chairman of the Subcommittee stated that a woman having called in a doctor on a Sunday evening to see her daughter, took his prescription to a chemist. The shop was open and the woman presented the prescription and also a bottle for the mixture. The chemist refused to dispense the prescription, and handed the bottle back to the woman, stating that the prescription was not marked "Urgent," and that he only opened for the benefit of his own customers on Sunday evenings, but that he would get it for her next morning. The woman obtained the medicine from another chemist on the following morning. The chemist in question agreed to give attendance when in on Sundays. It was resolved to recommend that, as the chemist has broken his terms



of service and shown a lack of common courtesy, he be severely reprimanded and cautioned. The Subcommittee's recommendation was approved.

**Preston.**—It was stated at a meeting of the Insurance Committee, on January 2, that nearly 259,000 prescriptions had been prepared during the last ten months without a solitary complaint locally. Mr. T. Sergeant, chairman of the Pharmaceutical Subcommittee, said the accuracy of the chemist had been marvellous. In one case investigated the insured person and not the chemist was to blame. The Committee sent out fourteen test prescriptions—twelve medicinal and two for appliances—and in not a single prescription was there an error. The report of the analyst pointed to accurate dispensing.

**Sheffield.**—At a recent meeting of the Insurance Committee the clerk presented a report from the Panel Committee on the ordering of Roboleine, which had been previously considered in November. The practitioner had still prescribed the preparation during subsequent months. It was now decided that he should be surcharged with the cost. In a financial statement by the clerk it was shown that £25,627 19s. 2d. had been received by chemists for the year and £515 by the doctors from the drug fund of 1927-28. Two reports had been submitted from the Joint Service Subcommittee. One was on a sample of mist. alb., which showed an excess of 8.6 per cent. of mag. sulph; a caution was given. In the second case it was agreed that no recommendation be made; a chemist had supplied emp. adhesiv. on a heavily filled cotton fabric of open texture in place of holland. Chemists' accounts for the month amounted to £2,150 9s. 5d.

**Smethwick.**—At a meeting of the Insurance Committee on February 5 the Benefits Subcommittee reported that during the quarter ended September 30, 1928, sixty-eight prescriptions for insulin were issued at a cost of £55 10s. 2d., and sixty-five prescriptions for serums and vaccines were also issued at a cost of £16 0s. 1d. The total cost of drugs, appliances, dispensing fees, etc., in Smethwick during 1928 was approximately £5,760, which is less than the cost for the year 1927, despite the increased number of persons provided for subsequent to April 1, 1928. Allowing for that increase number for comparative purposes, the cost of drugs, etc., for 1928 shows a decrease of approximately 6 per cent. compared with the year 1927. The Finance and General Purposes Subcommittee reported regarding the overpayment of the sum of £1 1s. 3d. to a chemist who had removed abroad, and a remittance for the amount in question had been received from him. Payments to chemists for November and December 1928 amounted to £465 6s. 2d. and £443 7s. 8d. respectively.

### SCOTLAND

**Roxburgh.**—A meeting of the County Insurance Committee was held on February 9 at Newtown St. Boswells. The clerk reported on tests of drugs and appliances supplied by chemists in Roxburghshire which had been made during 1928. He stated that members of his staff had taken two samples of drugs in each of the following towns—Hawick, Jedburgh and Kelso, and two samples of appliances in Hawick only. The samples submitted were in every respect satisfactory. The chairman said that these tests revealed a high standard of efficiency amongst the panel chemists in Roxburghshire. If this fact was made known among the general public it would do much to counteract the unfair criticism which had been made in some quarters that the drugs and appliances supplied to insured persons were of an inferior quality to those supplied to private patients. Mr. George Cairns, chemist and druggist, secretary of the Pharmaceutical Committee, in thanking the chairman for his remarks, stated that it was very gratifying to the chemists to know that all the samples were up to the requisite standard, and on behalf of the chemists in Roxburghshire he complimented the clerk and his staff for the courteous and efficient manner in which the taking of samples had been accomplished. The number of insured persons on the Committee's register on January 1 last was 19,265.

## American Tariff Revision

(Concluded from the C. & D., February 9, p. 176.)

### INCREASE ON THYMOL ASKED

Mr. Levi Cooke, Washington, appeared in behalf of the Orbis Products Trading Co., regarding the duty on thymol, which at present is dutiable at 35 per cent. *ad valorem*. This is manufactured from eucalyptus oil, which is dutiable at 25 per cent. Mr. Cooke suggested that the duty on the raw material be taken off, that the specific duty on thymol be increased to 60 per cent., or else that the product be classed with coal tar products, since German importations are coal tar synthetics.

### BOTANICAL DRUGS

Mr. S. B. Penick, of S. B. Penick & Co., asked the committee to advance from 10 per cent. to 33½ per cent. the duty on botanical drugs and other botanical products, including pyrethrum flowers mentioned in paragraphs 34 and 35, when advanced in condition by grinding or otherwise. German competition, he said, is making it increasingly difficult to process many of these products in the United States.

The duty of ½ c. a lb. on liquorice root should be removed, the committee was told by Adrian C. Humphries, of the MacAndrews & Forbes Co. As none is grown in the United States, this represents, he said, a needless burden on the industry which in the last five years has paid duties equal to 70 per cent. of its plant investment. He asked that the 25 per cent. duty on liquorice paste be retained.

### LINSEED OIL

Mr. J. B. Gordon submitted a brief on behalf of the paint section of the Bureau of Raw Materials of the American Vegetable Oil Industries relating to the compensatory duty on linseed oil. If the duty on flaxseed is increased from 40 c. to 60 c. per bushel, as has been asked, there should be no increase in the present duty of 3.3 c. per lb. on linseed oil, the brief declared, since this is more than enough to insure imports coming in in the form of seed rather than oil. The existing duty on flaxseed of 40 c. per bushel would be compensated for, he said, by a duty of 1⅓ c. per lb. on linseed oil, because of drawback allowances.

Since a duty of 2.4 c. per lb. on linseed oil is compensatory for a duty of 60 c. per bushel on flaxseed, the extra protection of 0.9 c. afforded by the present duty of 3.3 c. per lb. is sufficient to protect the domestic crusher and assure the imports coming in in the form of seed rather than oil, Mr. Gordon concluded.

### TARTARIC, OXALIC, FORMIC ACIDS

Any increase in the present duty of 6 c. per lb. on tartaric acid was protested against by Henry Platt Bristol, of the Bristol Myers Co., New York. This duty is sufficient differential for American manufacturers, he said, although he suggested that the present duty of 5 per cent. on the raw material, argols, be eliminated.

Mr. H. M. Hubbard, of the Royal Baking Powder Co., recommended that the duty on tartaric acid be increased from 6 c. to 9 c. per lb.; that the duty on cream of tartar be increased from 5 c. to 7½ c. per lb., and that the 5 per cent. rate on argols and wine lees and calcium tartrate be removed.

The increase from 4 cents to 6 cents per lb. in the duty on oxalic acid given by the President under the flexible provisions of the tariff should be maintained when the Bill is rewritten, the committee was told by Mr. August Kochs, of the Victor Chemical Works. He declared that his company showed a slight loss in oxalic acid production in 1927, but expected that the final figures for 1928 would show it to be breaking even.

Turning to formic acid, Mr. Kochs said that, while this acid costs a little less than oxalic to produce, none is made in the United States because the present duty of 25 per cent. is not sufficient protection. He asked a duty of 6 c. per lb. He also asked compensating duties on sodium formate of 3 c. per lb., sodium oxalate 3½ c. per lb., and calcium formate 4 c. per lb.



## German Tartaric Acid

THE United States Trade Commissioner in Berlin has been investigating the German tartaric acid industry, and his report, which is published in "Commerce Reports," indicates that Great Britain is the largest purchaser of the chemical from Germany. He estimates the world's production at approximately 20,000 metric tons, Germany's output being exceeded only by that of Italy, which country produces about 5,000 m. tons a year, followed by Germany with 4,500, United States with 3,500, Great Britain 2,500, France 2,000, Austria 500, Spain 500, Australia 500, Poland, Balkans and Russia 1,000 m. tons.

The German-Italian cartel thus produces 9,500 tons, against a combined capacity of 12,000 tons. The spread between production and capacity is an expression of cartel production regulation. Without the cartel, member plants doubtless would produce capacity and indulge in severe competition, thus reviving unsettled conditions that affected German producers in the world market before international cartel relationships were sealed.

### RAW MATERIALS MUST BE IMPORTED

As the world's second producer of tartaric acid, profitable production in Germany is nevertheless threatened on the one hand by imposition of severe import taxes on tartaric raw materials by Italy, and, on the other hand, by the general tendency in consuming countries to maintain high tariff walls against German tartaric acid. Germany must import its tartaric raw materials from abroad, while it exports from 75 to 80 per cent. of its tartaric-acid production.

German receipts of wine lees, the leading raw material imported, are shown in the following table:—

*German imports of Wine Lees from leading countries of origin*

Country of origin	1913	1925	1926	1927	First 9 months of 1928
	M. tons	M. tons	M. tons	M. tons	M. tons
Spain ..	3,991	8,971	4,860	7,425	5,546
Italy ..	3,907	1,250	1,637	1,302	707
France ..	1,453	—	493	401	404
Argentina ..	—	938	1,017	1,190	789
Portugal ..	—	—	887	1,429	948

Imports of tartar are chiefly from Spain, Italy and France, and more recently from Portugal, Greece and Argentina. The following table shows the amounts imported into Germany during recent years, compared with 1913:—

—	1913	1925	1926	1927	First 9 months of 1928
	M. tons	M. tons	M. tons	M. tons	M. tons
Spain ..	1,357	1,110	616	480	428
Italy ..	1,772	841	294	558	320
France ..	1,343	564	526	445	1,112
Portugal ..	—	—	—	155	142
Greece ..	—	—	—	221	142
Argentina ..	—	—	—	214	180

Exports of tartar have also declined since 1913, when 3,353 m. tons were exported; shipments in 1927 amounted to only 314 tons.

### ITALIAN EXPORT TAX ON CRUDE MATERIALS

The increase by Italy of its export tax on crude tartaric materials in 1927 from 5 to 20 lire per quintal and on cream of tartar from 6 to 24 lire adds a burden to the German tartaric acid industry of 17.60 mks. per 100 kilos tartaric acid in favour of Italian producers. Furthermore, the freight cost of wine lees from Italy to Germany amounts to 12 mks. per 100 kilos. The sum of these costs amounts to close to 30 mks. per 100 kilos, against the present market price per 100 kilos tartaric acid of 290 mks. The average price before the war was 235 mks.

Although of secondary choice as raw material for tartaric acid production—after cream of tartar—wine-lees production of tartaric acid, with its complicated separations of extraneous materials, is preferred in Germany because of lower production costs. Germany depends on foreign sources of supply of wine lees, with an average of 25 per cent. tartaric acid content.

### EFFECT OF SPANISH CUSTOMS DUTY

Spain has a customs duty of 75 pesetas on tartaric acid while developing its own industry to a state of self-sufficiency. Since Spain is Germany's chief source of raw materials, the German industry faces the possibility of a curtailment of its raw material supply, which has happened to a certain extent in the case of Italy. The effect of the Italian export duty may be observed in the declining importance of Italy as a source of supply, in favour of Spain. Argentina and Portugal, moreover, are assuming importance as suppliers of wine lees, while France furnishes the major portion of the increased requirements for tartar.

### TWO GERMAN PRODUCERS

Of Germany's 4,500 ton production, Joh. A. Benckiser, Ludwigshafen, produces 75 per cent., or about 3,500 tons, and C. H. Boehringer Sohn, Nieder-Ingelheim, produces the rest. Benckiser has a capacity of 4,500 tons, and Boehringer 1,500, or a total of 6,000 tons, equal to Italian capacity in the L'Appula plants at Milan and Barletta, since the Arenella company ceased tartaric acid production in favour of L'Appula and confined itself to production of citric acid.

The two German tartaric acid producers, Benckiser and Boehringer, belong to a local syndicate, Vereinigte Weinsäurefabriken (United Tartaric Acid Manufacturers), of Wiesbaden, formed in 1925 as a restoration of a cartel of the same name that functioned from 1906 to 1918. The German tartaric acid cartel entered into an agreement also in 1925 with the Italian producers. This agreement is calculated to stabilise prices between the two and to allocate production and markets. It expires after August 1930. Under this international cartel arrangement German producers have a sales quota of about 47 per cent., against the Italian of 53 per cent.

### GREAT BRITAIN LARGEST PURCHASER

German exports of tartaric acid, which comprise 75 to 80 per cent. of the production, totalled 2,422 m. tons in the first nine months of 1928. In 1927 3,307 m. tons, valued at 7,390,000 mks., were exported; in 1926, 2,748 tons, having a value of 5,451,000 mks.; in 1925, 3,577 tons, valued at 7,122,000 mks., comparing with pre-war (1913) shipments of 2,955 m. tons, with a value of 7,202,000 mks.

The principal countries of destination and the amounts shipped to each were as follow:—

*German exports of Tartaric Acid*

Country of destination	1913	1925	1926	1927	First 9 months of 1928
	M. tons	M. tons	M. tons	M. tons	M. tons
Great Britain	1,366	1,033	1,086	672	743
Spain ..	—	65	—	120	30
Czechoslovakia	—	73	43	91	96
Argentina ..	415	—	236	477	134
Netherlands ..	24	1,083	357	473	52
United States	124	532	398	734	338
France ..	—	—	—	185	278

At the current rate of shipment, German exports of tartaric acid for the calendar year 1928 are estimated at approximately 3,600 m. tons, or 80 per cent. of a 4,500-ton production.

The best export market for German production is Great Britain, which country purchases approximately 1,500 tons of tartaric acid annually, principally from Italy and Germany. Likewise, Europeans believe that the American industry is sensitive to a tariff increase from a current \$0.06 per lb., or 55 mks. per 100 kilos, to \$0.09 per lb., or 85 mks. per 100 kilos.

MARKING THE BOTTLE.—"Memo. 361 Foods," issued by the Ministry of Health (Stationery Office, 1d.) and dated January 1929, contains (paragraph 25) the following instruction:—"When a sample of a prescribed medicine is taken, the height of the contents in the bottle supplied by the vendor should be marked in his presence prior to the division of the sample. The bottle so marked should be submitted to the analyst in order to enable him to determine the total quantity of medicine supplied."



## Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, February 21

BUSINESS has been quieter in Mincing Lane markets this week, the wintry conditions having had an adverse effect, but at the same time a fair amount of interest is shown in certain articles. Among drugs, Matto Grosso ipecacuanha is firm, dearer and still in upward tendency. Menthol is a shade easier. Senega is in fair demand at unchanged rates. New cod liver oil is offered at much lower rates, fishing having proved very satisfactory. Calumba is a trifle weaker, and hydrastis is higher to arrive. West African ginger is easier on c.i.f. terms, and prices for mosc grades or carnauba wax are the turn cheaper. Essential oil business is very dull, but movements in Sicilian lemon oil have caused a further advance and West Indian distilled lime with star anise are firmer. Business in pharmaceutical chemicals remains fairly good, and it is anticipated that export trade will be stimulated by the British Industries Fair now being held. Aspirin is in considerable demand, but prices are somewhat unsettled. Bromides have a tendency to weaken owing to keen competition. Phenacetin and phenazone are unchanged. Benzaldehyde is slightly easier, and sodium benzoate is firmer. Among the industrial chemicals a steady flow of business continues, noticeable features being the brisk demand for acetate products, such as acetone and acetic acid; sal ammoniac is also active with supplies limited. Carboic acid is quieter, although prices are well maintained. In the fixed oils group, castor, cotton and rape oils are firm and dearer; linseed prices show a slight premium on the week, and turpentine is substantially unaltered on a dull market. Palm oils have been steady throughout.

Higher	Firmer	Easier	Lower
Castor oil	Anise oil (c.i.f.)	Agar-agar	Carmine
Cotton oil	Gum acacia	Benzaldehyde	Cod-liver oil
Hydrastis	Lime oil	Calumba	Farina
Ipecacuanha	Linseed oil	Crocote oil	(Dutch, f.o.b.)
Lemon oil	Sodium	Ground nut oil	Pimento (c.i.f.)
Rape oil	benzoate	Menthol	Wax
Rubber			(Carnauba)

### Cablegram

BERGEN, February 20.—The catch of cod since the opening of the season amounts to 9,500,000, against 4,600,000 at the corresponding period of last year, and the yield of steam-refined non-freezing medicinal oil amounts to 13,756 hectolitres, against 4,496 hectolitres last year. Market is quiet at 117s. per barrel c.i.f. for finest 1929 Lofoten steam-refined non-freezing oil.

### Crude Drugs, etc.

AGAR AGAR is quiet, with No. 1 Kobe strip offering at 4s. 1½d. per lb. and to arrive 3s. 9d. c.i.f. is quoted.

ALOES.—Curaçao in cases is very firm and scarce; to arrive from 85s. to 90s. per cwt. c.i.f. is quoted for t.q. Capo is steady, with good bright hard No. 1 offering at 40s. per cwt. The exports from the Union of South Africa during October amounted to 161,183 lb. (£1,235), against 44,888 lb. (£385) in October, 1927. During the ten months ended October 31, 1928, the exports were 855,285 lb. (£7,120), against 650,330 lb. (£4,820) in the corresponding period of 1927.

ANTIMONY has continued firm with a moderate demand for Chinese on the spot, with holders asking £38 10s., which is the nearest quotation, while c.i.f. terms for shipment from China are at around £35. English regulus has had a better inquiry, and sellers quote £54 to £55. The demand for antimony ore is still lifeless so far.

BENZOLIN.—Sumatra has been in steady demand, especially for the better grades; a few cases of really good almondy firsts have been sold at from £11 10s. to £12 per cwt.; seconds are quoted at from £7 10s. to £8 10s., and fair almondy well-packed thirds £6 15s. to £7 5s. per cwt.

BUCHU.—The exports from the Union of South Africa during October amounted to 6,153 lb. (£219), against 7,736 lb.

(£355) in October, 1927. During the ten months ended October 31, 1928, the exports were 163,536 lb. (£6,635), against 123,760 lb. (£5,395) in the corresponding period of 1927.

CADMIUM.—There has been a fair amount of buying for home and also export, and the tone is about steady, spot prices being from about 4s. to 4s. 1d. per lb., with the lower figure considered the nearest quotation. The outlook is viewed with confidence, although consumers are for the present only buying from hand to mouth.

CALUMBA is a trifle easier, with 55s. per cwt. asked for good natural sorts.

CARDAMOMS are steady but quiet. Bold Ceylon-Mysore is 7s. 6d., medium 5s. 3d., small medium 4s., small 3s. 6d., green Alleppy 4s., Bombay seed 5s. 6d. to 5s. 9d. per lb.

CARMINE is cheaper, pure Nacarati No. 40 offering at from 27s. to 27s. 6d. per lb. and No. 40 B at from 23s. to 23s. 6d. per lb.

CLOVES.—Zanzibar are quiet at 1s. 4½d. to 1s. 5d. per lb. on the spot. To arrive, January-March shipment is quoted at 1s. 4½d. and March-May shipment at 1s. 5d. per lb. c.i.f. The landings of Zanzibar in London during the week ending February 16 were 100 and the deliveries 13, leaving a stock of 2,208, against 11,450 in 1928 and 8,493 in 1927. The landings of Madagascar during the week ending February 16 were nil and the deliveries 13, leaving a stock of 2,387 bales.

COD-LIVER OIL.—The production so far has been very satisfactory, especially in the extreme North, but in the Lofoten district, where the finest oil is produced, fishing has not been large, as it is still early. In the extreme southern districts so far no catch has been made. In some quarters new Lofoten oil was offered for shipment during the first week in February; this is extraordinary in view of the fact that in previous years no new Lofoten oil was previously shipped before the middle of March. Buyers are therefore somewhat sceptical as to whether these early offers really represent 1929 Lofoten oil. A fair amount of business has been done, agents quoting from 112s. to 117s. per barrel c.i.f., according to brand.

Up to February 9 the catch, the output of cod-liver oil, and the quantity of liver for natural oils in the whole of Norway was as follows:—

		Catch of cod	Yield of steam-refined cod-liver oil	Livers for crude oils
1929	..	6,150,000	7,907 hectol.	2,239 hectol.
1928	..	2,478,000	2,530 "	1,428 "
1927	..	3,491,000	4,385 "	597 "
1926	..	3,900,000	6,460 "	1,591 "
1925	..	2,400,000	4,586 "	3,578 "

on the corresponding date.

An Aalesund report, dated February 15, states that: "It appears that the livers this year are yielding a higher percentage of oil than what was the case in 1928 and 1927. While in 1927 and 1928 the livers at the beginning of the season were yielding respectively 45 per cent. to 55 per cent. and 32 per cent. to 50 per cent. cod-liver oil, some 47 per cent. to 56 per cent. (average more than 50 per cent.) are being obtained this season. It may be taken for granted, therefore, that the output of cod-liver oil will become larger this year than what it was in 1928, and the more so as the prospects for the fishing are rather good in all districts. Beside of that, it is being reckoned that some 25,000 to 50,000 barrels were being carried over from last year. For these reasons the price has declined materially during the last four to six weeks. To-day 115s. to 120s. per barrel is being quoted for the finest new season's cod-liver oil, against 155s. to 170s. at the same time of last year. It is not precluded that the price may still further decline; on the other hand it must be considered that at the present price the consumption is likely to increase quite considerably, and not only for medicinal, but principally for animal feeding purposes."

CORN PRODUCTS, ETC.—Guaranteed water-white American glucose (corn syrup) is 22s. 6d. per cwt. for February-March delivery, ex store London. Dutch maize starch powder (cornflour) is 16s. 3d. per cwt. on the spot. American is 16s. 9d. per cwt., ex store London, for February-March delivery. Pearl starch is 16s. 3d. for February-March ex store London. Dutch maize starch crystals is 21s. 6d. on the spot, and American is 19s. 6d., ex store London for February-March delivery. Dutch dextrin is quoted at 22s. to 26s. per cwt. on the spot as to quality. American canary for February-March delivery is 19s. 4½d. and white for February-March delivery is 19s. 1½d., ex store London. Dutch farina is quoted at 14s. 6d. per cwt. on the spot, and to arrive 12s. 6d. per cwt. f.o.b. is wanted.

GINGER of all descriptions is firm. West African is 53s. on the spot, and for shipment up to 50s. c.i.f. is quoted. Japanese is 60s., washed rough Cochin 72s. 6d., Calicut 85s., Jamaica, small grinding quality, 70s. to 80s., medium 85s. to 95s., and bold 100s. to 125s. per cwt.

GUM ACACIA is dearer at 44s. 6d. per cwt. for Kordofan sorts on the spot and 40s. 6d. c.i.f. to arrive. Cleaned is 47s. 6d. spot and 42s. c.i.f. to arrive.



HYDRASTIS is dearer at from 14s. 9d. to 15s. per lb. c.i.f. to arrive, and on the spot from 14s. 9d. to 15s. is also quoted.

IPECACUANHA is strong and dearer, with spot sales of Matto Grosso at 14s. per lb. Sales on c.i.f. terms include Minas at 15s. 6d. per lb. c.i.f. for January-March shipment. Cartagena appears to be non-existent.

MAGNESIUM.—The regular supply of home-made metal is steadily absorbed, and quotations range from about 3s. 3d. up to 3s. 9d. per lb. for small ingots and sticks, while wire is 7s. 6d. to 12s. 6d. and ribbon at 11s. to 14s. per lb.

MENTHOL is easier at 22s. 6d. per lb. for Kobayashi-Suzuki on the spot. To arrive, January-March shipment is 20s. 6d. c.i.f. and March-May 20s. 3d. c.i.f.

MERCURY.—Business generally has again been of limited extent, but there is no sign of ease, especially in view of the gradual depletion of stocks in consequence of the quite insignificant quantities coming in from abroad for some time past. In January only 311 bottles arrived, but against this 470 bottles were re-exported. Current spot quotations stand as before at £22 2s. 6d. to £22 5s. per bottle, less the customary discount.

OPIMUM valued at £830 and £1,500 has been received from A. Turkey and E. Turkey. The following report has been received from Turkey:—

CONSTANTINOPLE, January 31.—The arrivals during the past fortnight have been 1,508 cases druggists', 364 "softs," and 105 Malatia, a total of 1,977, against 1,795 last year. Stocks are now 1,004 druggists', 183 "softs," and 86 Malatia, making a total of 1,273 cases, against 1,273 a year ago. The sales have amounted to 122 druggists' at £T223 to £T25 per oke, 73 "softs" at £T25 to £T28, and 38 Malatia at £T24 to £T25 per oke. The cry for some time back has been, "Your price too high," in spite of the low prices ruling for several years, and speculation is again rife on account of the severe weather being experienced. Sellers have withdrawn and an increase has resulted.

PEPPER has been quiet; fair black Singapore is 1s. 5½d. per lb. on the spot, and January-March shipment 1s. 4½d. c.i.f. Lampong is 1s. 5d. spot; to arrive, the sales include January-March shipment at 1s. 4½d. to 1s. 4¼d.; March-May at 1s. 4d. to 1s. 3½d. to 1s. 4d. c.i.f. Tellicherry for January-March shipment has been sold at 147s. to 146s., and March-May at 144s. to 142s. c.i.f. Allepy for January-March shipment has been done at 143s. per cwt. c.i.f. White Muntok has been quiet at 2s. 3½d. per lb. on the spot; sales include March-May at 2s. 2½d., April-June at 2s. 2½d., and May-July shipment at 2s. 2d. to 2s. 2½d.

PIMENTO is quiet at 1s. 0½d. per lb. On the spot, for January-February shipment 112s. c.i.f. is quoted, and March-May at 115s. c.i.f.

RUBBER is considerably better, and is dearer by 1d. per lb. since our last report. At one time on Monday spot was done up to 1s. 0¾d. per lb., but declined towards the close. This sharp recovery in prices is mainly due to the arrival of the consumption figures from New York, which gives the total American consumption during last month as approximately 43,000 tons, which, besides being a record, is fully 12,000 tons above that of last year. This undoubtedly indicates great activity amongst the tyre factories, especially so as January is generally regarded as a quiet month for manufacturers. The movement of supplies again commands attention, and last week arrivals totalled 1,085 tons, whilst deliveries were 1,741 tons, showing a decrease of 656 tons in the stocks. The London stock now stands at 24,757 tons, against 63,769 tons at the corresponding period last year. Quotations (Wednesday, 5 p.m.):—No. 1 standard ribbed smoked sheet, spot and February, 1s. 0¼d.; March, 1s. 0¾d.; April-June, 1s. 0½d.; July-September, 1s. 0¾d.; October-December, 1s. 1d. per lb.

SEEDS.—Business continues quiet and trade is not helped by the wintry conditions prevailing. ANISE.—Spanish 62s. 6d. and Russian 26s. 6d. CANARY shows no demand. Mazagan is 19s. 6d. spot, and 20s. c.i.f. is quoted forward; Saffi is 19s. spot. CARAWAY—Dutch is 37s. 6d. per cwt. on the spot. CUMIN.—Maltese is 54s. and Morocco 49s. on the spot; market remains firm. CORIANDER.—Morocco is 17s. 3d. on the spot, and 16s. 6d. to 17s. c.i.f. is quoted forward. FENUGREEK.—Morocco is 18s. spot, and 17s. 6d. is quoted for forward shipment. HEMP.—Manchurian is 20s. and Chilian 21s. 6d. LINSEED.—Mazagan remains firm at 20s. 6d. spot and 21s. c.i.f. is quoted forward. FENNEL.—Indian is 68s. spot and 65s. per cwt. c.i.f. is quoted forward.

SENEGA is in very fair demand and unchanged at 5s. 4d. per lb., and is likely to remain steady.

SHELLAC has fluctuated within narrow limits; usual standard TN orange closed at 197s. 6d., fine orange 220s. to 320s., pure button 235s., and AC cake 210s. To arrive, the sales include TN for February-March shipment at 187s. to 188s. to 186s. c.i.f. For delivery the sales comprise March at 190s. to 192s., to 188s., May 190s. to 193s., and August at 192s. 6d. to 198s. to 194s.

TONKA BEANS remain very firm, with a limited quantity of Angostura offering at from 7s. to 7s. 3d. per lb.

WAX (CARNAUBA) is quiet and a trifle easier. Fatty grey is 118s. 6d. per cwt. on the spot; afloat is 115s. and February-March and March-April shipment 112s. c.i.f. Chalky grey is 121s. on the spot and 114s. c.i.f. for February-March and March-April shipment. Prime yellow is 185s. spot and 165s. c.i.f.; dull yellow is 167s. 6d. spot and 157s. 6d. per cwt. c.i.f. for shipment.

### Essential Oils

BUSINESS in this group is very dull again, but the demands experienced for lime on spot and star anise for shipment have created a firmer tendency. The feature of the week is the position of Sicilian lemon, which is full of possibilities.

ANISE (STAR) is firmer for shipment. The latest quotations are 2s. 4d. per lb. c.i.f. in leads and 2s. 1½d. c.i.f. in drums. Leads are held at 2s. 7d. per lb. on the spot.

BERGAMOT continues weak at around 20s. per lb. c.i.f. for shipment. The spot value is unchanged at 20s. 6d. per lb.

CARAWAY.—Rectified Continental is quoted at 7s. 3d. per lb.

CASSIA.—No change has taken place and very little business is reported. The quotation on spot is 5s. 3d. per lb., while oil for shipment on London analysis ranges from 4s. 8d. to 4s. 9d. c.i.f., according to quantity.

CINNAMON LEAF is neglected, but the spot quotation is maintained at 7s. per lb. nominal. The value forward is 6s. per lb. c.i.f., but no business is passing.

CITRONELLA is in poor demand at unchanged rates. Java is worth 1s. 11d. per lb. either c.i.f. or on the spot. Ceylon is 1s. 9d. spot and 1s. 8d. per lb. c.i.f.

CLOVE.—English distilled from first hands is maintained at 10s. per lb. in quantities for 90-92 per cent. eugenol. A notable feature this week is the arrival of small parcels from Spain and France, which corroborates the contention that the position here is very strong.

EUCALYPTUS has met with continued inquiry, but the stocks are too heavy to permit of any appreciable advance. Quotations on the spot are unchanged at 1s. 9½d. to 1s. 11d. per lb. according to percentage of cineol.

GERANIUM.—Bourbon on the spot is neglected at 18s. 6d. per lb. Algerian is quoted at 16s. 6d. per lb. on the spot.

LEMON has advanced. The demand for the fruit in Sicily has been good, and the future course of prices will depend on the American purchases of fruit during March and April. Genuine hand-pressed oil is now held at 14s. 6d. to 15s. per lb. on the spot, and the shipment quotations range from 14s. 9d. to 15s. 2d. c.i.f. Machine-made oil is offered at 13s. 7d. per lb. c.i.f.

LIME, as forecasted in our report some weeks ago, is dearer on the spot at 32s. per lb. for West Indian distilled.

ORANGE.—Sicilian sweet is firm at about 21s. per lb. either c.i.f. or on the spot for good brands. West Indian is nominal at 18s. 6d. to 19s. per lb. on the spot.

PALMAROSA is unchanged at 12s. 6d. per lb. on the spot and 11s. 9d. c.i.f. to arrive.

PEPPERMINT.—Japanese dementholised is unchanged and in poor demand at last week's prices. On the spot the value is 6s. 10½d. per lb. for Kobayashi and/or Suzuki, with the shipment value for January-March at 6s. 4½d. per lb. c.i.f. American natural tin oil is neglected, and inclined to sag at 14s. per lb. on the spot and 13s. 6d. to 13s. 9d. c.i.f. for shipment. H.G.H. is 18s. 9d. per lb. on the spot and 17s. 10d. c.i.f.

ROSE (OTTO OR).—The Bulgarian Minister of Agriculture recently called a meeting of experts at Sofia to consider a series of measures which would improve the rose-growing industry. The struggle against parasites and diseases received particular attention. It has been decided to hold meetings for growers in order to keep them informed of the most recent and best methods, and the State is going to provide apparatus and the necessary materials as was done last season. The official figure of the production in 1928 is 1,264 kilos.

SPEARMINT lacks interest at last week's figure of 18s. 6d. c.i.f. and 19s. 6d. per lb. on the spot.

The following arrivals have taken place from the countries indicated during the period February 13 to February 19 (inclusive):—Almond (Fr.), 10 cs.; bay (B.W.I.), 8 cs.; bergamot (It.) 24 cs.; cajuput (D.E.I.), 87 cs. 2 dm.; caraway (Neth.), 5 cs.; citronella (Neth.) 4 dm., (Jv.) 6 dm.; clove (Madag.) 7 dm., (Fr.) 11 dm., (Sp.) 1 dm.; copaiba (U.S.), 4 cs.; eucalyptus (Aust.), 98 cs. 25 dm.; geranium (Reun.), 8 dm.; juniper berry (Ger.), 2 cs.; lavender (Br. Ind.), 1 cs.; lemon (It.) 52 cs., (Ger.) 5 cs. 7 dm.; lemongrass (Sp.), 1 dm.; lime (B.W.I.), 13 cs.; mandarin (It.), 6 cs.; neroli (It.), 1 cs.; orange (It.) 124 cs., (B.W.I.) 13 cs., (Ger.) 2 cs.; peppermint (U.S.) 5 cs., (Jp.) 20 cs.; petitgrain (Fr.), 1 cs.; pine (Ger.), 5 dm.; sandalwood (Aust.), 26 cs.; thyme (Sp.), 1 dm.; vetiver (Reun.), 2 dm.; wormseed (U.S.), 3 cs.; ylang ylang (Fr.), 1 cs.; undescribed (Br. Ind.) 10 cs., (Fr.) 2 cs.



## Pharmaceutical Chemicals, etc.

THE market for bromides and aspirin seems to be rather unsettled, but so far there has been no actual break in the former, while the latter is now steady at the rather lower prices. Sodium benzoate is moving up. Citric and tartaric acids are steady on spot. Business generally is not at all bad, and foreign trade will be stimulated by the British Industries Fair.

ACETANILIDE is steady but business is limited; B.P. crystals and powder, 1s. 4½d. to 1s. 6d. per lb., as to quantity.

AMIDOPYRIN remains slow with dealers offering on spot at about 7s. 6d. to 7s. 9d. per lb., ex store.

AMMON ICHTHOSULPHONATE is offered at from 1s. 4d. to 1s. 5d. per lb., according to quantity.

ASPIRIN.—Cheap parcels continue to weaken this market, so far as big quantities are concerned; one ton or more about 2s. 1½d.; a few cwt., 2s. 2d. to 2s. 2½d.; smaller parcels, from 2s. 3d. upwards.

BARBITONE is unchanged on a quiet market, dealers quoting spot at 5s. 6d. to 5s. 9d. per lb.

BENZALDEHYDE .03 is slightly easier on spot at 1s. 10d. per lb., for fair sized quantities.

BENZOIC ACID (B.P.).—Prices are very steady; quantities, ex works, 2s. 1d.; smaller parcels, ex store, about 2s. 3d. per lb. Business has been quite good.

BROMIDES.—There is a tendency for prices to weaken owing to keen competition, especially from dealers; quoted prices are about unchanged, but important business might be placed at a slight discount; dealers quote ammonium, 1s. 11d.; potassium, B.P. crystals, 1s. 7½d.; granular, 1s. 7½d.; sodium, B.P., 1s. 9½d. to 1s. 10d. per lb., for quantities in cases. British makers' list prices are unchanged; ammonium, 2s. to 2s. 3d.; potassium, B.P., 1s. 8½d. to 1s. 11½d.; sodium, B.P., 1s. 11d. to 2s. 2d. per lb., as to quantity.

CALCIUM LACTATE is steady with business fair; quantities at 1s. 2d. to 1s. 2½d.; smaller parcels, about 1s. 3d.

CHLORAL HYDRATE.—Duty paid crystals are unchanged with business rather slow; quoted from 3s. 1½d. to 3s. 3d. per lb., as to quantity.

CITRIC ACID (B.P. crystals).—The position is generally unchanged on the week with the spot prices ranging from 2s. 1d. to 2s. 2d. per lb., less 5 per cent., as to quantities. Since our last report there are secondhand sellers of foreign for shipment within the next three months at 2s. 1d. per lb. c.i.f. less 5 per cent., which is slightly below the price previously mentioned.

CREOSOTE (B.P.) is steady on a quiet market, dealers quoting at 1s. 8d. per lb. for quantities in demijohns.

CREOSOTE CARBONATE remains quiet; spot is offered from 5s. 10d. to 6s. per lb.

GUAIACOL CARBONATE is unchanged on a quiet market; quoted from 4s. 8d. to 4s. 10d. per lb.

HEXAMINE continues steady with competition keen for a fair sized business; free running crystals from 1s. 11d. to 2s. 1d. per lb., as to quantity.

LACTIC ACID (B.P.) is unchanged at controlled prices; five-ton lots, 1s. 6½d. up to 1s. 10½d. per lb., for small parcels.

METHYL SALICYLATE (B.P.) remains quiet with quoted prices at about 1s. 4d. to 1s. 6d. per lb., as to quantity.

METHYL SULPHONAL is steady on a dull market; quoted from 8s. 9d. per lb.

PARAFORMALDEHYDE is steady and is meeting with fair business; 100 per cent. powder, in kegs, 1s. 7d.; smaller parcels, 1s. 8d. per lb.

PARALDEHYDE is quiet at from 1s. 1d. to 1s. 3d. per lb., as to quantity and packing.

PHENACETIN is unchanged and business is fairly good; quoted from 2s. 2d. to 2s. 4d. per lb., as to quantity.

PHENAZONE continues in steady demand with the market unchanged; quoted from 3s. 7d. to 3s. 8d. per lb., as to quantity.

PHENOLPHTHALEIN continues at controlled prices; business moderate; quoted from 5s. 11d. to 6s. 1½d. per lb., as to quantity.

POTASSIUM PERMANGANATE (B.P.) remains dull with quantities in drums at 5½d. per lb.; smaller parcels, from 6d. ex store.

POTASSIUM SULPHOGUAIACOLATE is still slow of sale with dealers' prices at 3s. 8d. to 4s. per lb.

RESORCIN is moving fairly well at about the quoted prices of 2s. 9d. to 2s. 11d. per lb., as to quantity.

SALICYLIC ACID (B.P.) is unchanged at from 1s. 3d. to 1s. 6d. per lb. as to quantity.

SANTONIN is unchanged at the prices quoted in our issue of January 19 (p. 75).

SODIUM BENZOATE (B.P.).—Prices, as mentioned last week, are firmer with quantities in two-cwt. barrels at 1s. 8d.; in one-cwt. barrels, 1s. 8½d.; smaller parcels, 1s. 9d. upwards.

SODIUM SALICYLATE (B.P.) is steady and business is fair; crystals, 1s. 7d. to 1s. 8d.; powder, 1s. 6½d. to 1s. 7d. per lb., in cases, as to quantity.

SULPHONAL remains quiet with the spot price unchanged at about 6s. 3d. to 6s. 6d. per lb.

TANNIC ACID is steady with a moderate business; B.P. *levis*, in quantities, 2s. 10d.; small parcels, about 3s. per lb.

TARTARIC ACID (B.P. crystals).—There is a distinctly firm tone, and it seems probable that prices will move up during the next week or two from their present quoted rates of 1s. 4½d. to 1s. 4½d. per lb., less 5 per cent., for foreign in quantities.

THYMOL is unchanged, and business remains slow; synthetic fine white, 9s. 6d. per lb., in cwt. lots; ex ajowan seed, 11s. 3d. per lb.

VANILLIN is steady but business is very limited; 100 per cent. from cloves, 17s. to 17s. 6d. per lb.; ex guaiacol, 14s. 9d. to 15s. per lb.

## Industrial Chemicals, etc.

London, February 20.

A FAIRLY steady flow of business continues in this market and some items are in quite brisk demand, as, for instance, acetone, acetic acid and sal ammoniac.

ACETIC ACID continues in good demand with prices steady; 80 per cent. technical, £36 15s.; 80 per cent. pure, £37 per ton, in barrels; glacial, pharmaceutical, 99 to 100 per cent., £55 in glass demijohns; glacial, in barrels, £56 per ton, ex store.

ACETONE is well maintained on a firm and active market; B.C.S., ten-ton lots, £76 10s.; five-ton lots, £78 10s.; one to five-ton lots, £81; less than one ton, £85 per ton, in drums, ex store.

ALUM is meeting with fair business; lump, £8 5s. per ton, in casks, ex store; slightly less forward.

AMMONIUM CHLORIDE continues in steady demand with dealers' prices firm; grey galvanising, £21 10s. in casks, ex store; slightly less for contracts.

ANHYDROUS AMMONIA is selling fairly well; 99.95 per cent., 10d. to 1s. per lb., in loaned cylinders, carriage paid; slightly less for big contracts.

ARSENIC.—There has been only a limited business doing, and Cornish agents are still asking, as a rule, £16 5s. per ton f.o.b. mines, but business is possible at £16. The American market is steady to firm.

BARIUM CHLORIDE is steady with business still good; 98 to 100 per cent. prime white crystals, £11 5s. per ton, in casks, ex store; forward, £9 10s. f.o.b. Continent.

BLEACHING POWDER is unchanged with 35 to 37 per cent. offering at £6 12s. 6d. to £7 per ton, in casks, carriage paid, as to quantity.

CAUSTIC SODA.—Home makers' prices for consumers on contract are unchanged; 70 to 72 per cent., solid, £13 12s. 6d.; 76 to 77 per cent., £14 per ton, in drums, carriage paid to station.

COPPER-SULPHATE. — Home makers' terms were recently again raised on a continued export demand, although business has been less active, and they range from about £29 to £21 10s. per ton f.o.b. for casks, less 5 per cent. discount. This past week or so the cost of rough bar metal has fallen back considerably from the recent highest, and the best of the rise in sulphate may have been seen.

CREAM OF TARTAR is very steady on spot, and the market tends to harden; foreign is quoted from 93s. to 95s. per cwt., less 2½ per cent., ex store.

ISOPROPYL ALCOHOL is meeting with a steady inquiry; prices are at about 11s. to 12s. per gallon, in drums, ex store.

LITHOPONE is showing a little more life; dealers' quote 30 per cent. Continental red seal, £19 10s. per ton, in casks, ex store; slightly less for contracts.

OXALIC ACID is steady with quantities at £30 per ton, ex wharf; cwt. lots, 32s. ex store.

POTASH CAUSTIC is unchanged at Convention prices; business moderate: 88 to 92 per cent. solid, spot, less than one ton, £36 15s.; one to five tons, £33 5s.; five to fifteen tons, £32 15s. per ton, in drums, ex store; c.i.f. 30s. per ton less in all cases.

POTASSIUM CARBONATE is steady at dealers' prices; 90 to 92 per cent., £25; 96 to 98 per cent., £26 per ton, in casks, ex store; slightly cheaper for contracts.

POTASSIUM CHLORATE remains quiet with quantities to arrive at 2½d. per lb., ex wharf; small spot parcels from 3d. ex store.

POTASSIUM PERMANGANATE is steady but quiet; commercial quality, in two-cwt. drums, 5d. to 5½d. per lb., ex store.

POTASSIUM PRUSSIAN.—Business continues on a good scale; yellow, £63 10s. to £65 10s.; single casks, 7d.; small parcels, 7½d. per lb., ex store.

SAL AMMONIAC continues in active demand with supplies limited; dealers' prices are firm; dog-tooth crystals, £32;



medium, £29 7s. 6d.; fine white crystals, £18 12s. 6d. per ton, in casks, ex store; slightly less for contracts.

SODIUM ACETATE is steady on spot at £21 10s. per ton, in casks, ex store; slightly easier forward. March shipment.

SODIUM HYPOSULPHITE is steady, and a fair business is being done; pea crystals, in one-cwt kegs, £15 to £15 2s. 6d. per ton, ex store; commercial quality, £9 10s. in casks; British makers' price for pea crystals to home consumers on contract, £15 per ton, carriage paid to buyer's station.

SODIUM NITRITE is in more demand; 100 per cent. basis, £19 17s. 6d. per ton and 20s. 6d. cwt., docks, London.

SODIUM PRUSSATE is steady and business is about average; quantities from 4½d. to 4¾d.; small parcels, from 5d. per lb., ex store.

SULPHUR.—There has been a moderate inquiry for American crude 99 per cent., which is quoted £5 12s. 6d. to £3 17s. 6d., while Sicilian flowers are quoted about £12 7s. 6d.; refined ground £11 and roll £9 15s. a ton, all c.i.f. to arrive.

COAL TAR PRODUCTS, ETC.—Pitch is unchanged this week with the market still quiet. Business has been fair in some items. ANILINE OIL continues unchanged at from 8d. per lb., carriage paid, packages extra. ANILINE SALT is also unchanged at from 8d. per lb., carriage paid, packages extra. BITANAPHTHOL is quoted from 10d. per lb., carriage paid, for quantities. CARBOLIC ACID CRYSTALS are a little quieter, although prices are well maintained; deliveries of bulk quantities can be effected before second half of March; quoted at 6½d. per lb., carriage paid or f.o.b. in drums with over-casks for minimum 5-ton lots. Crude carbolic 60's 1s. 11d. per gallon, naked at works. CREOSOTE OIL is steadier but still quiet; ex works, 4½d. to 4¾d., f.o.b., 6½d. per gallon, in bulk quantities. CRESYLIC ACID is meeting with more business; the market is steady; pale, 97 to 99 per cent., American specification, 2s. 3d. to 2s. 4d. per gallon, f.o.b., drums extra; darker grades at cheaper prices. NAPHTHALENE is quiet and unchanged; imported flakes and balls, £15 10s. per ton, in cases, ex wharf. METHYL ALCOHOL is active with prices steady; spot £46 per ton, in drums ex store, and cheaper forward in quantities. PYRIDINE continues slow of sale; nominal at 4s. 6d. per gallon, f.o.b. TOLUOL meets with a fair amount of business; prices are unchanged. Commercial 90/7, 1s. 7d.; pure, 1s. 10d. per gallon, at works. XYLOL continues quiet; commercial, 1s. 7d.; pure, 1s. 10d. per gallon, at works. PITCH is unchanged at 32s. 6d. per ton, f.o.b. East Coast. The market continues quiet and unsteady.

#### Fixed Oils, etc.

CASTOR, cotton and rape oils are firm and dearer. Palm oils have been steady all the week. Linseed oil is quiet with values showing a slight premium on the week. Turpentine is dull and unchanged. ACID OILS have been quiet; quoted prices are about level on the week; coconut and/or palm kernel, 35s.; groundnut, 30s. 6d.; soya, 27s. 3d. spot. CASTOR.—A further advance in prices is recorded with the market firm; pharmaceutical, 52s. 6d.; first pressings, 47s. 6d.; second pressings, 45s. per cwt. in barrels on the spot in not less than one-ton lots. COCONUT remains quiet and is slightly easier for deodorised on spot at 44s. 6d.; Ceylon, 41s. c.i.f.; Cochin, 47s. c.i.f. COTTON.—Prices are fully maintained, and the market is now firm and bright; deodorised, 39s. 6d.; common edible, 37s. 6d.; soapmaking, 35s.; crude, 32s. spot. GROUNDNUT is quiet and easier; deodorised, spot, 46s. 6d.; crude Oriental, 39s. c.i.f. PALM KERNEL has been dull; deodorised, about 43s. 9d.; crude, 39s. spot. PALM.—Prices on average are about level on the week, and the market is steady with business better; Lagos, 39s. 6d.; softs, 39s. 6d.; mediums, 39s. 7½d.; hards, 40s. 6d.; bleached, 42s. 3d. spot. RAPE is firm at higher rates; refined, 47s. 6d.; crude, 45s. 6d. spot. SOYA is quiet and unchanged; deodorised, 41s.; crude, 35s. 6d. spot. LINSEED (raw, naked).—Prices show a slight advance on the week, but the market closes generally quiet. On spot, 31s.; February, 29s. 6d.; March-April, 29s.; May-August, 29s. 6d.; September-December, 30s. Boiled oil, spot, 34s. 9d. Hull, on spot, 29s. 1½d.; February, 29s. 1½d.; March-April, 29s. 1½d.; May-August, 29s. 4½d.; September-December, 29s. 9d. TURPENTINE.—There has been no new feature, and the market has remained exceedingly quiet with little change in value, although the undertone was fully steady. The London spot price closed on Wednesday evening at 46s.; March-April, 46s. 6d. per cwt. Deliveries here for last week were again very good, amounting to 2,120 barrels, and the total since January 1 represents 12,224 barrels, which compares with 13,250 barrels for the same period last year. Stocks were 28,794 barrels, which, in the absence of landings and afloats, constitutes the London visible supply, and compares with 55,253 barrels at the same date last year. RESIN.—There has been a moderate business, and prices occasionally were inclined to ease. C.I.F. rates for shipment from America were as follows:—B/D, 17s. 4½d. to 17s. 8d.; E/F, 18s. 5d.

to 19s. 2d.; G, 19s. 2d.; H/I, 19s. 3d.; K, 13s. 8d.; M/N, 20s. to 21s.; W.G., 23s. 0½d., and W.W. 25s. 7d. Terms, ex wharf, were about 6d. per cwt. more. WOOD.—Hankow on spot in barrels is steady at 73s. 6d. per cwt. OLIVE.—French B.P. is 6s. 6d.; edible, 7s. 3d. per gallon ex wharf; Italian edible, 8s. 6d. per gallon.

LUBRICATING, MINERAL, BURNING OILS, ETC.—A fair amount of business is reported, with lubricating oils steady. The market is generally unchanged on quotation. BENZOL is firm and active; 90's standard motor, 1s. 6d. per gallon, ex works, in tank wagons. Ex London works, 2d. per gallon more. FUEL OIL is steady and unchanged; 950 gravity, £3 7s. 6d.; 890 gravity, £4 per ton, ex tank; slightly cheaper forward. PARAFFIN OILS are unchanged; American standard white, 10½d.; water white, 11½d. per gallon, in barrels, ex wharf. PARAFFIN WAX AND SCALE.—Wax continues steady but quiet at from 3d. to 5d. per lb., according to melting point, in bags; scale is quoted for shipment at about £23 17s. 6d. per ton, c.i.f. London. WHITE OILS continue unchanged and in fair demand; special No. 1, £23 10s.; No. 1, £23; No. 3, half-white, £23 10s.; No. 4, half-white, £19 15s. per ton, drums and barrels free, ex wharf. SOLVENT NAPHTHAS are in moderate demand with the market steady; 90/160, 1s. 1d. to 1s. 2d.; heavy 90/190, 1s. to 1s. 1d. per gallon, naked at works. PETROLEUM JELLIES are quiet; white to snow white, £33 10s. to £47 10s.; amber and yellow, £17 15s. to £22; dark stiff green, £11 12s. 6d. per ton, barrels free, ex wharf. LUBRICATING OILS continue active and steady; prices are unchanged; spot, pales, £10 to £22 10s.; reds, £11 5s. to £22; dark cylinders, £13 5s. to £33 10s.; filtered cylinders, £21 to £34 per ton, less 2½ per cent. SOLUBLE OIL AND CUTTING COMPOUNDS are unchanged at from £20 to £23 per ton net. No. 1 RUSSIAN OIL is offering on spot at £14 per ton, less 2½ per cent., barrels free, ex wharf.

#### Italian Exports of Citrus Products

THE exports of calcium citrate for the period January 1 to September 30, 1928, reached a total of 13,971 quintals, or 3,073,620 lb., compared with 22,708 quintals, or 4,995,760 lb., in the corresponding period of 1927. This decrease is the direct result of the application of the Government's policy of restricting annual sales of citrate to certain specified quantities. The "Camera Agrumaria" was authorised to sell during the fiscal year, December 1, 1928, to November 30, 1929, at the minimum price of 550 lire per quintal (220 lb.). The previous price was 520 lire per quintal. There were exported 26,974 quintals of citric acid during the first nine months of 1928, against 15,440 quintals for the same period of 1927, an increase of 73 per cent. Shipments to the United States in 1928 (first eight months) amounted to 257 quintals valued at 407,664 lire, compared with 360 quintals worth 515,658 lire, in the corresponding period of 1927.

#### Dutch Caraway Seed Statistics

ORANJE of Amsterdam have issued a circular giving statistics of Dutch caraway seed, based on their experience of forty years in the trade; they may be read in conjunction with the figures given in our issue of October 27, 1923 (p. 531). They are as follows:—

		Exports, July 1 to June 30 †	
July 1, 1924.. No stock		Bags	
Crop—1924 ..	Bags	1924-1925 ..	193,741
	289,770 ..	1925-1926 ..	141,295
	1925 .. 276,572 ..	1926-1927 ..	108,456
	1926 .. 96,577 ..	1927, July-Dec. ..	76,455
	1927 .. 91,199 ..	1928, Jan.-June ..	56,839
1928 .. 83,800 ..		1928, July-Dec. ..	98,289
837,918		Loss by cleaning about 2 per cent.	675,075
		Loss in weight about 3 per cent.	*16,760
		Home consumption and for distilling: 4½ years ..	*25,140
770,975 bags			*54,000
			770,975

66,943 bags of 50 kilos. = stocks on January 1, 1929.

All figures with exception of those with a \* are official.

† The exports of spent caraway seed are not included in these figures.

The new crop 1929 is coming from 3,989 hectares only, which with an average yield of 25 bags per hectare will produce 100,000 bags, and together with the 67,000 bags stock on January 1 makes a total of 167,000 bags to cover the requirements until August 1929, or 19 months. Exports during the twelve months of 1928 were 155,128 bags, which means exports of 245,613 bags for 19 months, home consumption for sowing and distillation not being included. This involves more than 80,000 bags short for the next 13 months. Even if it is taken into consideration that exports in December 1928 were 10,000 bags more than in December 1927, on account of big exports to the U.S.A. in connection with enhanced rate of freight in 1929, the shortage remains too important to be neglected.





Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

### Sicilian Lemon Oil

SIR,—I think it well to call attention to the very gross adulteration of lemon oil at the present moment. The facts that the crop is very short, and that a large number of manufacturers have installed machinery for extracting the oil, have been the principal reasons for this wave of sophistication. The fact that the machine-pressed oil has failed to come up to expectations, but has resulted in a very inferior product, has caused a number of the smaller manufacturers to "doctor" their oil so as to, apparently, pass the B.P. requirements. Numerous samples of obviously machine-made oil which I have examined during the past month or so show specific gravities well above those of hand-pressed oils, due to the presence of a larger quantity of fixed residue. But many such samples contain 4.5 to 4.8 per cent. of citral! And these samples represent deliveries which can be bought at 2s. or more per lb. below the price of honest hand-made oil. I have in one case found an oil containing 8.5 per cent. of citral, with a specific gravity 0.870. In this case the "manufacturer" had obviously made up his mind to deliver an oil with the highest citral value of the season. It is to be hoped that analysts who have to deal with this oil will remember that, at present, figures are subservient to the nose.

Yours faithfully,

London, S.E.1.

ERNEST J. PARRY.

### Own Proprietaries

SIR,—Patent medicines will always be a sore thorn in the sides of chemists. They seem to be growing up like mushrooms; but there is a way of dealing with the gentlemen who allow less than a fair 25 per cent. margin for the chemist's services. I keep a black list of them all, and when one is sold I also include in the wrapping a sample of a similar preparation of my own. This seems to act very well, particularly in the case of cough mixtures, where it is amusing to see the number of bottles which return for refilling, with "Your own cough mixture, please, Mr. Tapwater, the same as the sample." A small box printing press is invaluable for printing the labels, and can be bought for 25s. With a suitable press, printing becomes a very profitable and pleasing hobby. I know quite well that those chemists who try this will be surprised at the results, and they will find customers coming from far and wide for their own remedies while other "tripe" will remain on their shelves, suffering acutely from "multibus cobwebibus."—I am, etc.,

JOHN TAPWATER (18/2).

### The Poison-Cupboard

SIR,—One hesitates to criticise the latest ideas in shop-fitting when carried out by experts, but there are certain details which occur to the man who has to use the fixtures which may not always strike the man whose job it is to make them. This came to my mind when looking at the illustrations of dispensing screens in the *C. & D.* of February 9 (p. 163), because the first thing which occurred to me was the inadequacy in size of the poison-cupboard. If this is only meant to hold a small stock sufficient for daily requirements no doubt it will do, the bulkier stock being kept in a larger cupboard elsewhere; but for a business which does any reasonable amount of dispensing and purchased some drugs in Winchester quantities, the space provided in these fittings is obviously inadequate. To-day it is not sufficient to keep the potent poisons, such as strychnine, hyd. perchlor., etc., in the cupboard, but everything on the schedule must go in—tr. camph. co., syr. hypo. co., and similar bulky articles. Then there is the question of the D.D.A.; here again the range has been considerably increased under the recent Regulations, and it is doubtful

whether the space allowed would hold all the preparations. Another consideration arises in regard to the glass panels; would a glass door be considered adequate protection for the "dangerous" drugs inside.—Yours truly,  
ADEQUOT (12/2).

### A Survey

SIR,—It is difficult perhaps to get the true perspective of an address from an abstract, and so there are one or two parts of the address of Mr. Wallbridge to the Liverpool Chemists' Association (*C. & D.*, February 9, p. 155) which might perhaps read differently if we had the full context. To ask a prospective apprentice whether he would like to be a chemist is akin to the example which was given some time ago in a correspondence on the engaging of assistants, where one man was asked what he wanted the job for. Naturally, the seeker of the apprenticeship is bound to say "Yes." But nine out of ten boys seeking apprenticeship have little or no preconceived idea on the subject; they have reached the school-leaving age and have to find some avocation in life, very often selected by their parents or recommended by their schoolmaster, possibly on the slender grounds that the boy likes the school laboratory or that he is fond of messing about with chemicals. The youth realises nothing of the hours of drudgery and study ahead of him, the examinations he will have to pass, the long hours of work in the pharmacy accompanied by the daily worries of the D.D.A. and other Acts, and the wage, paltry compared to other professions, at the end of it all. Now we have to acquire "knowledge how to keep out of the police court"—what an epitaph to our aims and studies when grappling with the new syllabus of the enlightened and advanced form of education introduced by our parent Society! With the speaker's aims for the future I am in entire agreement—the retention of the title "chemist," the parliamentary representation, the simplification of the Acts and Regulations concerning the conduct of pharmacy, the sale of weed killers, etc., above all, the dispensing of physicians' prescriptions, even if this meant the giving up in return of our right to counter prescribing.—Faithfully yours,  
ARGENT (18/2).

## Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics.

### Chlorodyne Takers

It is not an advisable policy to reduce the potency of any recognised medicament, even for such a praiseworthy object as breaking a drug-taker of his habit. In the first place, one is not supplying an article of the nature, substance and quality demanded. Although it was said by one of your correspondents that a gradual diminution of the potent ingredients was effected without the customer's knowledge, it is quite possible that this would not always be the case, and that finding the ordinary dose did not have the usual effect a larger and yet larger quantity would be taken, and then if a supply had to be obtained elsewhere the danger would become a very real one. Far better to have the courage of one's convictions and, if one has a customer who is purchasing such a drug too frequently, refuse to supply.—*Habitual* (12/2).

### Drug-Tariff Anomalies

"Anom." when writing about the drug tariff (*C. & D.*, January 26, p. 101), brings to light several curious anomalies which require clearing up. The worst feature from the chemist's point of view is that which requires him to order some proprietary and only be paid for part of it; such a thing happened to me recently. A script called for 3j. and 3ss. respectively of two proprietaries, and in each case the smallest quantity obtainable was a ½-lb. bottle. In the case of tablets, some manufacturers are now packing smaller sizes, especially for Insurance work, as otherwise the chemist would have the right to supply a complete original packet; would it not be possible for the proprietors of liquid specialities to do the same thing and supply 3j. or 3ij. quantities for N.H.I. prescriptions only, and not for retail?—*Granum* (4/2).



## Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

*G. D. R.* (7/2).—CATTLE RINGWORM OINTMENT.—The following are alternative formulas to those given in "Veterinary Counter Practice":—

I		II	
Sulphur (precip.)	5iv.	Iodi ...	5iv.
Creosote ...	5ij.	Pot. iod. ...	5ij.
Pot. bicarb. ...	5iv.	Picis ...	5j.
Boric ointment to	5ij.	Adipis ...	5vij.
III		IV	
Spt. picis.		Ac. carbol. ...	5j.
Sulph. sub. ...	aa. 5j.	Adipis ...	5vij-x
Adipis ...	5j.		

Mercuric nitrate ointment (diluted according to the nature of the case and the animal) is often supplied as a cattle ringworm ointment. The parts affected should be thoroughly cleansed and dried before applying the ointments.

*E. W.* (9/2).—POWDER FOR GAPES IN POULTRY.—The following are formulas containing carbolic acid:—

I		II	
Pulv. cubeb.	gr. $\frac{1}{2}$ - $\frac{1}{4}$	Slaked lime,	
Ac. carbol. ...	gr. $\frac{1}{8}$ - $\frac{1}{16}$	Carbolic acid, of	
Ferri sulph.	gr. $\frac{1}{8}$	each ...	gr. $\frac{1}{8}$ - $\frac{1}{16}$
One daily for a few days.		Tobacco ...	gr. $\frac{1}{16}$
		One every second day.	

*J. W.* (12/2).—(1) SYRUP OF IRISH MOSS.—The following is the formula for syr. chondri co., N.F. III:—

Chondri crisci	...	gr. xvj.
Ext. ipecac. liq.	...	℥xvj.
Ext. scillæ liq.	...	3ss.
Ext. senegæ liq.	...	3ss.
Tr. opii camph.	...	5vij.
Talc. purif.	...	3ss.
Sacchar. alb.	...	3xx.
Aq. dest.	...	ad 3xxxij

Macerate the Irish moss in 2 oz. of boiling water on a water bath for fifteen minutes, strain through flannel, which wash with water to make 2 oz. of strained liquor. Mix the tincture, fluid extracts, 10 oz. of water and the French chalk; shake occasionally for half an hour, and filter, returning the filtrate until it comes through clear. To this add the sugar and the mucilage, dissolve without heat, strain and wash the strainer with water to 32 oz. The dose is 5j. to 3ss.—(2) LEMON, HONEY AND GLYCERIN COUGH LINCTUS.—See *C. & D. Diary*, 1929, p. 312.

*P. R.* (25/18).—(1) REMOVAL OF SCAR MARK.—Colloidal iodine oil would be of no value for this purpose, nor can we suggest any treatment. The mark may fade in the course of time.

*Bryste* (25/18).—Strictly, the prescription should have been sent back, but practically you did right.

*J. P.* (12/28).—LIQUID DRY SHAMPOO.—The following is a "simpler" formula, but as it contains industrial spirit you will need permission to use this. Application should be made to the local officer of the Board of Customs and Excise, to whom the formula should be submitted for approval.

Potassium carbonate	...	12 oz.
Water	...	2 gall.
Industrial spirit	...	3 gall.
Synthetic violet	...	1 oz.
Dry extract of quassia	...	1 oz.
Saponin	...	2 dr.

*G. S. W.* (12/28).—GOUT AND RHEUMATIC MIXTURE.—The formula for which you ask is as follows:—

Sodii sulphatis	...	5iv.
Sodii salicylatis	...	3ij.
Potassii bicarbonatis	...	3ij.
Potassii nitratis	...	3ss.
Potassii iodidi	...	5j.
Vini colchici	...	5iv.
Tr. gent. co.	...	5iv.
Sacchar. ust.	...	q.s.
Aq. chloroformi	...	ad 5j.

*T. M.* (4/28).—FIXING CORK TO METAL.—Thin cork discs can be fastened to metal by means of shellac varnish or sealing wax, provided it contains shellac.

*E. P. J.* (11/28).—It is difficult to diagnose the complaint from which the ferret is suffering from such a meagre description of the trouble. In any case it would be practically impossible to treat the part affected.

*S. M.* (24/128).—WHOOPING COUGH POWDER.—This is a pale brown powder of composite character. Analysis indicated the following: glycyrrhizin ammon., starch, some vegetable powder to which probably the starch belongs, a sulphate, and possibly a little sugar of milk. There is very little mineral matter, probably only vegetable ash.

## Legal Queries

*F. N.* (15/2).—The prescription you refer to is not within the scope of the Dangerous Drug Acts.

*G. H. A.* (4/1).—A qualified chemist is not required to take out a new authorisation for dealing in "dangerous" drugs in the ordinary course of retail business.

*R. H. E.* (18/2).—(1 and 2.) All preparations containing diamorphine are now under the Dangerous Drugs Act Regulations, and must therefore be supplied only when prescribed by a registered medical practitioner. (3) We are not in possession of sufficient information to give a definite reply.

*X. Y. Z.* (20/2).—The grounds of liability to medicine-stamp duty are, briefly:—(1) That a given preparation is secret; (2) that proprietary rights in it are claimed; (3) that it has been patented or forms the subject of a trade mark; (4) that it is recommended for one or more ailments.

*P. J. B.* (29/1) holds a shop and house under a five-years' lease which will expire next July. He has an option to buy the premises which he is not in a position to exercise. If the landlord refuses to renew the lease, will "P. J. B." have a claim for compensation under the Landlord and Tenant Act? ["P. J. B." should have given formal notice of his claim to compensation not less than twelve months before the expiration of the lease, and having failed to do so he has, apparently, forfeited his right to compensation. He should consult a solicitor.]

*B. K. M.* (15/2) bought a motor-car two months before he could make use of it, and the seller verbally agreed to pay half the cost of garaging the car in the meantime, and if the garage expenses exceeded £2 to pay the whole of the excess. The seller also agreed to supply a grease gun with the car. The garage charges have come to £2 10s., and no grease gun has been supplied. Can "B. K. M." recover the extra 10s. garage expenses and the value of the grease gun from the seller? [Yes, if he can satisfy the Court that the car was sold upon the terms stated. It is entirely a matter of evidence.]

## Retrospect of Fifty Years Ago

Reprinted from  
The "Chemist and Druggist," February 15, 1879

### A Doctor Defends Counter Prescribing

I am proud to say my father was a chemist and druggist, and through his exertions I was enabled to become a surgeon, and I can assure you, Sir, I shall be one of the last medical men to try and exterminate a class of men (from whom many a surgeon of eminence sprang) because they happen to prescribe for a simple cold or sore throat, etc. It is simply monstrous to encourage such heartless conduct, to pay informers to swear to a lie; but I am convinced of the fact that the jealousy evinced towards chemists is chiefly taken up by the tail end of the profession. I know there are some few medical men (sons of chemists) who have taken up the cause against the chemists' prescribing, but these are very few indeed—perhaps men who have succeeded a little, and then turned their backs on their own fathers—on the very trade which brought them into their present position. I am glad to say I am not one of those unprincipled fellows. [From a letter to the Editor.]





[Commenced C. & D., July 5, 1924]

**Prompt.**—In commerce the term "prompt" has its usual meaning of immediate, and the expression "prompt cash" signifies that cash must be paid at the time of the purchase. In some trades the period of credit allowed for payment for goods bought is fixed by what is called a "prompt note."

**Propyl Alcohol.**—Propyl alcohol,  $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ , or  $\alpha$ -hydroxypropane, occurs in fusel oil. It may be prepared by heating allyl alcohol with potassium hydroxide, by reducing propaldehyde or propionic anhydride with sodium amalgam, or allyl alcohol with aluminium in potassium hydroxide solution, or by the addition of water to the product of reaction of trioxymethylene and zinc ethyl. The action of *B. butylicus* on glycerin produces it in small quantities. It is a colourless liquid, b.p.  $96.6^\circ\text{--}97.19^\circ$ , s.g. 0.808 at  $15^\circ$ , miscible with water in all proportions. Oxidation with nitric acid yields carbon dioxide, oxalic acid and propyl acetate. On distillation with zinc it yields propylene and water, and with potassium hydroxide and iodine iodoform is produced.

**Proprietary Articles Trade Association.**—The formation of the Proprietary Articles Trade Association was due to the initiative of the late Sir (then Mr.) William Glyn-Jones; in the autumn of 1895 he issued "An Anti-Cutting Record," and an early result of his propaganda was that at a meeting of those interested, held in London on December 13, a resolution for the formation of an association of manufacturers and distributors of proprietary goods was carried unanimously. The P.A.T.A., as it was afterwards designated for brevity, was formed in London on January 29, 1926, with a constitution and rules which, with slight modification, are still in force. Prior to the formation of the Association, individual schemes of price protection (q.v.) had met with some degree of success. The cardinal point of the P.A.T.A. arrangement was the triple combination between manufacturers, wholesale distributors and retail vendors, each class agreeing to support the other two in the protection of prices by refusing to supply traders who cut prices habitually. This arrangement involved the use of what is called a "barred list" or "stop list" of defaulting persons. The scheme has continued to function; it is claimed on behalf of the Association that complaints have been promptly dealt with as they arose, and that there are now but few well-known proprietary articles remaining outside the scope of the list. The affairs of the Association are managed by a council consisting of twelve owners of proprietary articles, twelve wholesale representatives, and twelve retail vendors; meetings are held quarterly, and four members are elected annually in each of the three classes. The rates of annual subscriptions are:—Owners, £6 6s.; wholesale distributors, £10 10s.; retail vendors, 7s. 6d. General Secretary, Mr. H. E. Chapman, 43 Gordon Square, London, W.C.1.

**Pro Rata.**—In proportion.

**Prospectus.**—The statutory definition of a prospectus is "any notice, circular, advertisement or other invitation to the public for subscription for or purchase of any shares, debentures or debenture stock of any company." A copy of every prospectus issued must be signed by every director or proposed director of the company, and filed with the Registrar of Companies at Somerset House. Every prospectus must state:—(a) The contents of the memorandum of association; (b) the number of shares fixed by the articles of association as the holding qualification of a director and any provisions in the articles as to the remuneration of the directors; (c) the names, descriptions and the addresses of the directors; (d) the minimum subscription upon which the directors may proceed to allotment; (e) the number

and amount of shares or debentures issued within the previous two years otherwise than for cash, and the consideration given for them; (f) particulars of the vendors of property to be paid for out of the proceeds of the issue; (g) the amount paid for property acquired, including the amount, if any, paid for goodwill; (h) the amount of the preliminary expenses; (i) the amounts, if any, paid to the promoters; (j) particulars of contracts other than ordinary business contracts; (k) particulars of the nature and extent of the interest, if any, of every director in the company; and (l) the voting rights of the holders of shares if of more than one class. The directors and other persons responsible for the issue of the prospectus are liable to penalties if they do not comply with these requirements, unless they can show that any defects in the prospectus were due to want of knowledge of matters not disclosed or honest mistakes of fact. A person who is misled by a material omission from or misstatement in a prospectus may have the right to rescind the contract to take up the shares, or bring an action for damages; but he cannot retain the shares and bring an action for damages. It is a misdemeanour knowingly to publish false statements in a prospectus, and a person who does so may be prosecuted for obtaining or attempting to obtain money by false pretences. A company which does not issue a prospectus at the time it is formed must not allot any shares until it has filed at Somerset House what is called a "statement in lieu of prospectus," which must contain substantially all the information specified above.

**Protargol**, novargan, or silver proteinate, is an organic silver compound, introduced as a substitute for silver nitrate, and contains 8.3 per cent. of silver, which is not precipitated by alkalis, alkali sulphides, nor acids. It forms a yellow powder, soluble in water 1 in 2. Solutions should be made as required, and the salt should be protected from light. The best way to make a solution is to rub the desired quantity of protargol to a smooth cream with cold water and then add further quantities of water or the protargol can be set aside with the required volume of water in a closed container when solution takes place gradually. Solutions should not be shaken vigorously as much frothing is apt to occur. The addition of glycerin also affects rapid solution. Protargol, on account of its antiseptic action, is employed in gonorrhoea (0.25-1 per cent.), in cystitis and urethritis (as an injection 5-10 per cent.), as vesical douche 1 in 1000. Bougies usually contain 5 per cent., and tampons 5-10 per cent. As a prophylactic a 20 per cent. solution with addition of glycerin can be used. Protargol solutions are non-corrosive and non-irritant, but may cause slight stains. These can be removed with soapy water, or if of long standing, with potassium iodide or sodium thiosulphate, ammonium persulphate or hydrogen peroxide and ammonia. Solutions should never be prepared with hot water, as this decomposes the product and the resulting solution is irritant.

**Protection of Animals Act.**—It is illegal to administer or cause to be administered to any animal any poisonous or injurious drug or substance without reasonable cause, and to sell, expose for sale, or give away any grain or seed poisoned unless for *bona-fide* use. Laying down poison for destruction of vermin in any place, unless proper precautions are taken to prevent domestic animals reaching the same, is unlawful. See also Animals, Drugging.

**Protest.**—When a person is compelled by circumstances to pay a sum of money which he does not admit owing, he can pay "under protest," and thereby reserve to himself the right subsequently to sue for the recovery of the amount so paid.

**Protest (Bill of Exchange).**—When a foreign bill of exchange is dishonoured on presentation for acceptance or payment it must be "protested" before a notary public. The written declaration made and signed by the notary at the request of the holder of the bill is called a protest, and it must contain a copy of the bill and also the following particulars:—(1) The person at whose request the bill is protested; (2) the place and date of protest; (3) the cause and reason for protest; (4) that demand has been made; and (5) whether or not the drawee or acceptor could be found. If it is impossible to find a notary at the place where protest must



# The C.&D. Commercial Compendium

be made, any responsible householder may in the presence of two witnesses give a certificate signed by them attesting the dishonour of the bill. As a rule, a bill must be protested at the place where it is dishonoured. Inland bills need not be protested.

**Proxy.**—A written authority by one person to another to do some act is called a proxy. As a rule, proxies are used to give authority to vote at a meeting of creditors or shareholders by a person who is entitled to a vote and is unable to be present. The person who acts upon an authority of this kind is also called a proxy. A proxy to vote at one meeting must specify the date of the meeting, and a separate proxy is required for each meeting, even if two are being held on the same day. The stamp duty on a proxy is one penny, and an adhesive stamp may be used provided that the person giving the proxy signs across the stamp. A general proxy bearing a 10s. stamp may be given conferring authority to vote at all meetings.

**Prunella Balls.**—The globular form of sal prunella (q.v.), now manufactured in various sizes, and consisting of fused potassium nitrate with a little nitrite. It is not known how "prunella" came to be substituted in general use for "brunella" (diminutive of "brunus," brown), the name of an epidemic in which the tongue became coated with a brown deposit; but the salt and the herb of the same name were so-called from their reputed property of healing the complaint. The balls have been used for several years past as a popular remedy for sore mouth and throat: the smaller sizes are largely employed as a filling for smelling-bottles which contain a coloured and perfumed ammoniacal solution.

**Prunus.**—The true medicinal prune of English pharmacy is derived from *Prunus domestica*, var. *Juliana*, D.C. It is largely cultivated in France near Tours, in the valley of the Loire. The typical species appears to be a native of the countries extending from Greece to Northern Persia, and was introduced into Europe long before the Christian era. A variety of this species was known to Pliny as having laxative properties. *Prunus Damascena* are frequently mentioned by ancient Greek physicians. In the earlier London Pharmacopœias several sorts of prunes are mentioned, but in those of 1746, 1788 and 1809 *Prunum Gallicum* is especially ordered, its chief use being as an ingredient of the lenitive electuary. The variety *Juliana* D.C. is still regarded in France as the medicinal prune. In its fresh state it is ovoid, of a deep purple colour, not depressed at the insertion of the stalk, with a scarcely visible suture, and no furrow. The flesh does not adhere to the stone. The stone is short, about  $\frac{7}{10}$  to  $\frac{8}{10}$  of an inch long and  $\frac{5}{10}$  to  $\frac{6}{10}$  of an inch broad, broadly rounded at the upper end and slightly mucronulate, narrowed and somewhat stalk-like at the lower end and truncate; the ventral suture is broader and thicker than the dorsal one. The fruit is dried by alternate exposure to the heat of the sun and of an oven. When dried it is  $1\frac{1}{2}$  inch long, black and shrivelled, the dried pulp is brown and tough, with an acidulous fruity saccharine taste. When French prunes are scarce, another plum which Koch regards as a distinct species, named by Borkhausen *Prunus acononica*, but regarded by De Candolle as *Prunus domestica*, var. *Pruneauliana*, D.C., is imported as a substitute. This plum is widely cultivated in Germany and used in the dried state as an article of food. It differs from the ordinary prune in being rather larger and more elongated, and in having a thicker skin and in the stone being narrower, flatter, and pointed at both ends, with the central suture much more strongly curved than the dorsal. The fruits are also more prone to be covered with a saccharine efflorescence. Both these varieties are obtainable in grocers' shops in this country.

**Prunus Serotina.**—See Wild Cherry Bark.

**Prussian Blue**, or ferric ferro-cyanide,  $\text{Fe}_3[\text{Fe}(\text{CN})_6]_2$ , first manufactured in Great Britain in 1770, is a compound of iron and cyanogen, usually prepared by the action of potassium ferrocyanide and ferric salts:

$4\text{FeCl}_3 + 3\text{K}_4\text{Fe}(\text{CN})_6 = \text{Fe}_3[\text{Fe}(\text{CN})_6]_2 + 12\text{KCl}$ . By varying the conditions of reaction several varieties of Prussian blue can be produced, but all the blue compounds are amorphous substances, which yield colloidal solutions in water. Owing to the tendency of colloids to adsorb other substances from solution it is difficult to prepare them in a pure condition. The freshly-prepared blue precipitates contain indefinite quantities of water. When cold neutral solutions of one molecule of a ferric salt and one molecule of potassium ferrocyanide are mixed, a soluble Prussian blue is formed, the dry substance having the composition  $2\text{K}[\text{Fe}(\text{Fe}(\text{CN})_6)] + \frac{3}{2}\text{H}_2\text{O}$ . When a cold solution of potassium ferrocyanide are mixed, a ally to a cold solution containing an excess of a ferric or ferrous salt, or when soluble Prussian blue is digested with a solution of ferric chloride, precipitates are formed of normal ferric ferrocyanide,  $\text{Fe}_3[\text{Fe}(\text{CN})_6]_2 + 10\text{H}_2\text{O}$ , usually referred to as Prussian blue. Turnbull's blue, obtained by precipitation of a solution of potassium ferricyanide with an excess of a ferrous salt is, after exhaustive washing with exposure to air, identical with ordinary Prussian blue. Reactions involved in the formation of the blues are not simple double decomposition, but mutual oxidation and reduction takes place and adsorption phenomena, and generally speaking the precipitates produced are mixtures of definite insoluble compounds or insoluble substances with soluble constituents adsorbed from solutions. Both the soluble and insoluble Prussian blues are ferric ferrocyanides. Commercial blues, steel-blue, bronze-blue, etc., are usually mixtures of varying compositions. See Paris blue.


**Prussiates**, cyanides or hydrocyanates are compounds of the radical cyanogen CN. Cyanogen  $\text{C}_2\text{N}_2$  is a poisonous colourless gas, soluble in water and alcohol with an odour resembling bitter almonds. It can be prepared by heating mercuric cyanide and collecting the gas evolved over mercury. The gas can be condensed to a colourless liquid of s.g. 1.8. The term prussiate is not often used now in chemical literature, but it survives in the commercial names of many chemicals as prussic acid, red and yellow prussiate of potash, etc.

**Prussic Acid in Poisons Schedule.**—The term "prussic acid" is applied to a solution of hydrogen cyanide. The British Pharmacopœia describes the one mentioned as diluted hydrocyanic acid. The poisonous nature of this substance depends on the amount of hydrogen cyanide contained therein; the schedule quotes certain limits, viz., "All preparations or admixtures containing 0.1 or more per cent. of prussic acid." Such preparations or admixtures are in Part I of the Schedule; those containing less than this amount are in Part II.

**Prussic Acid.**—See Hydrocyanic Acid.

**Psycho-Analysis.**—The following definitions are given by W. Brown in his "Suggestion and Mental Analysis," which contains a selected bibliography of the subject:—"As a *method* it is a method of free association of bringing back early memories, early phantasies, and early mental tendencies by getting the patient to fall into a state of reverie with the critical sense in abeyance, and to allow ideas to come up from the subconscious. It was found by Freud that these ideas, when they came up, were often emotionally tinged. . . . Thus, in addition to the method of psycho-analysis there has arisen the *theory* of psycho-analysis, according to which the psychoneuroses are due to the disturbance of sex-development, the theory that sex life on its psychical, if not on its physical, side begins early in life, that it is not single but multiple, that there are a number of partial processes or tendencies . . . and these tendencies of early life can undergo normal development, in which they are partially transformed. . . . If any partial process persists untransformed, it constitutes a perversion. If it persists, but undergoes repression, the result in consciousness is the symptoms of a psychoneurosis. . . . 'Complex' is a term, first introduced by C. G. Jung, to denote a system of repressed and emotionally tinged ideas which, under cover of the unconscious, exerts a more or less baneful influence on the working of the conscious mind."





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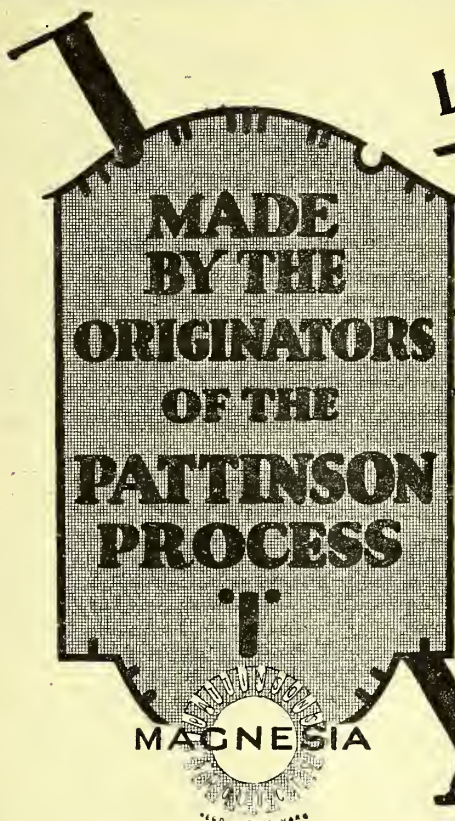
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C.R. Harker, Stagg & Morgan Ltd.	Willows, Francis, Butler & Thompson Ltd.
Harkness, Beaumont & Co. Ltd.	Woolley, Jas., Sons, & Co. Ltd.
Hatrick, W. R., & Co.	Wright, Layman & Umney Ltd.
Hirst, Brooke & Hirst	Wyleys (Lim.)

Barry, E. J., New York  
Finlay Dicks & Co., New Orleans  
E. Fougere & Co., 90/92 Beekman Street, New York  
Chas. L. Husking, Inc., 5 Platt Street, New York  
Lehn & Fink, Inc., N. York  
McKeeson & Robbins, Inc. New York

Muth Brothers & Co., Baltimore  
S. B. Penick & Co., Inc. New York  
Roller & Shoemaker, Philadelphia  
Schieffelin & Co., Inc. New York  
Shoemaker & Busch, Philadelphia

## GENUINE RASPBERRY VINEGAR

(ARNFIELD)

**CONTAINS NO PRESERVATIVES**

Fully guaranteed

- (i) To meet the requirements of the Food and Drugs Act and also
- (ii) The new Pure Food regulations.

Made from genuine Fruit Juice and pure cane sugar, supplies will keep indefinitely without fermentation or deposit. Sold in casks, carboys and Winchester quarts, sample and quotation will be sent on receipt of enquiry stating quantity required.

**J.C. ARNFIELD & SONS  
LIMITED.**

*Manufacturing Chemists,*

**GADSBY WORKS, PRINCES ST.  
STOCKPORT.** Established 1786.

Telephone : 601 (2 lines) Pr. Bch. Exch.  
Telegrams : Chemicals, Stockport.

## GLYCERINE

The chemically pure glycerine supplied by us is guaranteed to comply with all the requirements of the Food and Drugs Act and the British Pharmacopœia.

**PRECIPITATED CHALK.** Finest and lightest, also heavy grades.  
**COD LIVER OIL.** (Finest Lofoten.)  
**CASTOR OIL.** **OLIVE OIL.**  
**DECOLORISING CARBON.**  
**PERSULPHATES:** Ammonium, Potassium & Sodium.

**HALLER & PHILLIPS, LTD.** (Established as GEO. HALLER & CO., in 1878)  
Mildmay Chambers, 69 Bishopsgate, London, E.C.2.  
Phones: London Wall 4456/7. Tel. Add.: "Haloid, Stock, London."

## WESSANEN'S PURE COCOA POWDER PRIME COCOA BUTTER

Sales Office :

12 Broom Lane, Broughton Park,  
MANCHESTER.



# CRUDE DRUGS SPICES ESSENTIAL OILS

Peppermint  
Sassafras  
Spearment  
Orange  
Lemon  
Cumin  
Dill  
Nutmeg  
Caraway  
Juniper  
Wormseed  
Cedar Wood  
Oils and  
Chaulmoogra  
Oil, Etc.

*Speciality:*

## American Botanical Drugs

Cascarilla  
Euonymus  
Hydrastis  
Wild Cherry  
Grindelia  
Senega  
Jalap  
Lobelia  
Hemlock  
Cascara  
Curacao Aloes  
Scammony  
Podophyllum  
and  
Kamala, Etc.

### AGENCIES:

PEDER DEVOLD OIL COMPANY, AALESUND.  
"ORANJE," AMSTERDAM. GOULD WITCH HAZEL CO., BOSTON.  
W. KRUG & CO., AMSTERDAM. M. SALAMONE, TURIN.  
EXCHANGE ORANGE AND LEMON PRODUCTS CO., CALIFORNIA.

## WHEELER & HUISKING, LTD.

26 GREAT TOWER STREET, LONDON, E.C.3

# Sturgeon Brand Chemicals

## CITRIC ACID

CITRATE of POTASH  
CITRATE of SODA

FERRI et AMMON  
CIT.

## BICARBONATE of POTASH

CARBONATE of POTASH

## PRECIPITATED CHALK

CALC. CARB. PRECIP.

for Dentifrice Pastes, &c.



ESTD. 1823.

## ROCHELLE SALTS

PULV.

## SEIDLITZ

TARTRATE of SODA  
TARTRATE of POTASH

## CREAM of TARTAR

# JOHN & E. STURGE L<sup>TD.</sup> WHEELLEY'S LANE BIRMINGHAM

AGENTS:  
H. J. BAKER & BRO., 81 Fulton St., NEW YORK  
G. REINBOLD & CIE., 10 Rue Perrée, PARIS

CABLES: "STURGEON, BIRMINGHAM"  
CODES: A.B.C. 5th & 6th Edns., BENTLEY'S  
MARCONI INTERNATIONAL



# LOZENGES PASTILLES

LIQUORICE & MENTHOL

*Glossettes*  
REGD.

## Compressed Tablets

PACKED OR IN BULK, FOR WHOLESALE,  
— RETAIL AND EXPORT TRADES. —

**ERNEST JACKSON & Co., Ltd.**

London Office: Plantain Place, Crosby Row, Boro', S.E.1

Works: CREDITON, Devon.

\*Phones: Hop 2668 and Crediton 10.

# Tablets

Enquiries are invited for

## ASPIRIN AND CASCARA TABLETS

IN BULK OR PACKED.

A Customer writes:—"Re Aspirin Tablets. Your sample was one of the best we have ever had, we anticipate doing good business with you if you can maintain that quality."—WE CAN, AND MEAN TO!!

LET US QUOTE YOU.

**CASTLE HUSKISSON, LTD.**

Manufacturing Chemists,

Swinton Works, Moon St., Islington, N.1

ESTAB. 1768.

Private formulæ Pills and Tablets carefully and accurately prepared at lowest possible prices.

# Pills

## The Wholesale **PILL AND TABLET HOUSE**

Buy from Specialists.

Quality is our first concern.

PRICES VERY MODERATE.

Contracts for any quantity.

Quotations gladly given.

**HOWARD LLOYD & CO., LTD., LEICESTER**

## **SODIUM SALICYLATE B.P.**

A "P.M. BRAND" PRODUCT OF OUTSTANDING QUALITY.

SUPPLIED IN BOLD, BRIGHT GLISTENING FLAKES, OR POWDER.

SEND A POST-CARD FOR SAMPLES OR PRICES.  
THE RIGHT PRODUCT AT THE RIGHT PRICE.

Enquire also for

**ASPIRIN B.P.** (all forms),

**ASPIRIN TABLETS** (in bulk)

and **SALICYLIC ACID B.P.**

all of which maintain the P.M. Standard.

**PIERSON, MORRELL & CO., LTD.**

THE ORIGINAL BRITISH ASPIRIN MAKERS,

100 QUEEN'S ROAD, BARNET.

\*Phone No.:  
Barnet 0723.

Telegrams and Cables:  
"Pierson Morrell, Barnet."



# An entirely new line

—with heavy advertising  
and fine profits behind it!

**An amazing discovery!**  
Sparkling  
**PINE TONIC BATHS**  
in your own home!

THE beautiful golden  
essence draws out all the poisons  
lurking in the pores and in-  
creases the circulation at the surface  
of the skin. At the same time it  
creates a fragrant tonic atmosphere  
which refreshes the lungs and stimu-  
lates the action of the heart.

**Why not a sparkling tonic  
pine bath to-night?**  
It will give a delightful  
tingling freshness to your skin!

**Here's a new idea —**  
Sparkling tonic pine  
essence in your bath!

THE beautiful golden coloured  
pine essence draws out all the  
poisons lurking in the pores and in-  
creases the circulation at the surface  
of the skin. At the same time it  
creates a fragrant tonic atmosphere  
which refreshes the lungs and stimu-  
lates the action of the heart.

For tired nerves, rheumatic stiffness or  
that "draggy" feeling the benefit is simply  
amazing; and after a tiring day's work or  
strenuous exertion a Novopine Tonic  
Pine Bath is just what you need.

Just one Sparkling Pine Tablet in your  
bath will freshen your whole body and give  
you a wonderful feeling of comfort and  
relaxation.

Your chemist will supply you with  
Novopine or qd. in stamps will bring you,  
post free, a sample direct. Order a coupon  
to-day or fill in the coupon below for sample.  
Natural Products Ltd., London & Glasgow.

**Novopine**  
Sparkling Pine  
Bath Tablets

MEAS. NATURAL PRODUCTS LTD.  
40, Farnham Street, London, E.C.4.  
3 reduce 2d. in stamps for sample of  
this sparkling Pine Bath Tablets.  
Please send all orders to address below.

Name \_\_\_\_\_  
Address \_\_\_\_\_

Send this coupon to-day

Cartons containing 6 tablets 2/-  
Large Boxes containing 3 cartons 6/-

**S**TARTING in a few weeks now, striking advertisements will be appearing in leading daily, women's and medical journals for this remarkable new product. Any customer you introduce to Novopine Sparkling Pine Bath Tablets will be grateful to you for having drawn attention to them.

They are sold in delightful gold coloured boxes, which are a positive adornment to any counter, and so soon as you decide to display them you will find them selling fast! We recommend all chemists who enjoy trade in good class districts to order a stock of this line.

If you have any difficulty, write direct to Natural Products, Ltd., 40 Farnham Street, E.C.4. We will see you are supplied at once.

2/-  
per carton  
containing 6  
Tablets

6/- per box  
containing 3  
Cartons

# Novopine

## Sparkling Pine Bath Tablets

## Your wholesaler stocks it!



# Halving the Death Rate in Pneumonia

The death rate in approximately 1,000 cases of pneumonia, in hospital, was only 9.6 per cent. when

**SOLVOCHIN and TRANSPULMIN**

were used, compared with 20 per cent. in 2,000 cases under other methods of treatment, without these two original means of injecting quinine.

(See *Medical World*, Aug. 24th, 1928, p. 523.)

When your Doctors require SOLVOCHIN or TRANSPULMIN for a case of pneumonia they will need it quickly.

**SOLVOCHIN** : Boxes of 3—2 c.c. ampoules 5/-

**TRANSPULMIN** : Boxes of 6—1-2 c.c. ampoules 6/-

**E. H. SPICER & CO. LTD.**  
**WATFORD, HERTS.**

And at 72 Wigmore St., W.1.

Telephones { Watford 1784-1785  
Mayfair 3667

## THERE IS PROFITABLE BUSINESS TO BE DONE IN CINEMA SPRAY SOLUTIONS

ASK FOR SAMPLES AND PRICES.

**JOSEPH BROOKS & CO., LTD.**

Wholesale Druggists and Manufacturing Chemists.

42 SHUDEHILL

MANCHESTER



# Petrolagar

(Regd. Trade Mark)

The new style bottle contains precisely the same quantity as the former and affords more convenience to your customers. Order stocks from your wholesaler to-day to meet increased demand.

**DESHELL LABORATORIES LTD., BRAYDON ROAD, LONDON, N.16**  
Phone: CLISSOLD 7741.



# GOODALL'S

**W**E make and pack practically all the usual chemist lines—and many special ones of our own that are distinctly unusual. Especially we ask that you allow us to show you what we can do in



**Waterglass    Vitamine Malt  
Olive Oil    Health Salts  
Salines    Seidlitz Powders**

**The 'Velva' Series** of popular own-name lines (illustrated alongside).

**The Ku-Bist Series of Toilet Creations.**

14 beautiful toilet lines very keenly priced.

**WHY NOT LET US SHOW YOU WHAT WE ARE OFFERING?**

Ask for a contract price and samples of

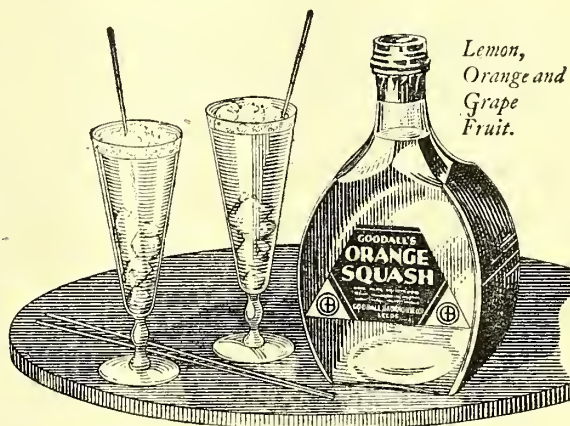
anything you need, or, better still, allow us to send a representative to call with specimens and every detail.

*Illustrated Lists sent gladly on request.*

**Goodall's Fruit Squashes**—a new line which our friends say is wonderful.

## **Perfection in Own-Name work.**

Our printer simply *cannot* give you other than perfectly satisfactory and suitable own-name work, for we have none but the best of modern type, perfectly chosen for own-name purposes and expertly set. The result is own-name labels that look what they should—that give our lines the finish and perfection you like to see on the things that bear your name, and for which you accept personal responsibility.



*Lemon,  
Orange and  
Grape  
Fruit.*

GOODALL, BACKHOUSE & CO.

LEEDS.



# Link up with Nujol advertising

A postcard will bring particulars of Special Bonus Offers for Window Display.

Nujol advertising for 1929 is still larger, embracing more papers, covering a wider area, and is to continue throughout the year. Its purpose is to bring about daily use of Nujol by the fit as well as the ailing to ensure regular habits and good health.

No retailer should neglect frequent window and counter displays to link up his shop with this advertising.

## Nujol

REGISTERED TRADE MARK

Distributors for NUJOL LABORATORIES:

ANGLO-AMERICAN OIL CO., LTD.  
ALBERT STREET, CAMDEN TOWN, LONDON, N.W.1

Telephone:  
Hampstead 8066.

### PRICES:

2/- size  
16/10 per doz.  
3/- size  
25/2 per doz.  
13/6 (100 oz.  
Hospital size)  
117/6 per doz.

Telegrams:  
"Nufinjol-Norwest-  
London."

## Chemists & Druggists

*should note that*

Beecham and Veno Proprietaries yield fair profits, and are the best paying propositions to handle.

Beecham and Veno Proprietaries entail no loss to the Chemist, as any stocks which may become damaged in any way are promptly replaced free of charge.

Beecham and Veno Proprietaries are now regarded as the best selling proprietaries in the Drug Trade.

Beecham and Veno Proprietaries are worth a display in your establishments, as their steady and increasing sale will amply repay any selling co-operation extended to them.

It is therefore in the interests of all Chemists and Druggists to hold good supplies of

**BEECHAM'S PILLS**  
**DR. CASSELL'S TABLETS**  
**GERMOLENE**  
**VENO'S LIGHTNING COUGH CURE**  
**BEECHAM'S POWDERS**

For latest Price List and particulars send a post-card to  
**BEECHAMS PILLS, LTD., Chester Road, MANCHESTER**

## Dr. BENGUÉ'S BALSAM

RHEUMATISM, NEURALGIA, GOUT.

Dr. BENGUÉ'S ETHYL CHLORIDE.

Dr. BENGUÉ'S DRAGÉES.—EUPURGO.

PULMO (BAILLY).—FORXOL.—OPOBYL.

ANESTILE.—NARCOTILE.—HEMOSTYL.

LIPIODOL.—MUTHANOL.—ARHEMAPECTYL.

ENTERO ANTIGENS.—STAPHYLOTHANOL.

NEOPANCARPINE. RICARD'S CACHETS.

BENGUÉ & CO., LTD., MFG. CHEMISTS,  
24 FITZROY STREET, LONDON, W.1.

ESTABLISHED OVER 60 YEARS

## PERRYS POWDERS

FOR CHILDREN'S AILMENTS

TRADE  MARK.

Wholesale from PERRYS POWDERS, Ltd., LEEDS



# TRY AN 'ASPRO' WINDOW DISPLAY AND BUY ON BONUS TERMS

We are frequently pointing out the wonderful pulling power of the 'ASPRO' Window Display on account of its linking up with continuous and ever-increasing publicity. A test made of a display will interest all chemists who wish to increase their business.

## 'ASPRO' has a Tremendous Power to Build Up a Chemist's Business

A test will demonstrate what a great power 'ASPRO' Publicity is to help the Chemist. It is not only on account of the actual 'ASPRO' that it usually sells, but also on its great value in bringing customers into the Chemist's shop who would not otherwise have come in. Every time you put an 'ASPRO' window display in you connect up with a £250,000 continuous advertising activity just the same as if you put your own name at the foot of the advertisements. Why not write us for a window display to-day, also take advantage of the liberal bonus terms shown below whereby you can make an extra 17% profit?



SEND FOR ONE OF THESE DISPLAYS



## Buy 'ASPRO' on Bonus Terms and Get 17% EXTRA PROFIT

Just have a look through your purchases of 'ASPRO' and you will find that you are in a position to buy on Bonus terms. Buying on Bonus terms means extra profit averaging 17% to you. So why not place your next order through your Wholesaler on Bonus terms?



## WHAT THE BONUS IS

**BONUS on 10's** { One Gross Order - Bonus 1 doz. pkts.  
Half Gross Order - Bonus ½ doz. pkts.  
Half Gross 10's is minimum order accepted for Bonus purposes.

**BONUS on 25's** { One Gross Order - Bonus 2 doz. pkts.  
Half Gross Order - Bonus 1 doz. pkts.  
Quarter Gross Order - Bonus ½ doz. pkts.  
Quarter Gross is minimum quantity.

NO BONUS ON 60's.

## CONDITIONS

The only conditions made are that the Chemist who buys on these terms undertakes to show Advertising matter in his shop window for 14 days and sell at advertised prices. As 'ASPRO' is so extensively advertised, this action will not only bring customers into the Chemist's shop to purchase 'ASPRO' but should enable the Chemist's staff to make other sales to the customers. Acceptance of Bonus is considered acceptance of conditions regarding display and selling prices. For Bonuses it is not necessary to buy both sizes at the same time, i.e., single lots 6 dozen 10's or 3 dozen 25's will qualify the Chemist.

## HOW TO ORDER BONUS PARCELS

We do not sell direct to the Chemist. All our business goes through Wholesalers. Orders may be sent either to your Wholesaler or direct to us. If to us, state the name of your Wholesaler so that we may forward the order on, and the Bonus will be supplied direct by us.

**ORDINARY PRICES** for { 6d. size containing 10 tablets - 4/8 dozen  
1/3 size containing 25 tablets - 11/6 dozen } **NOTE.**—2/6 size contains  
'ASPRO' are as follows: { 2/6 size containing 60 tablets - 21/- dozen } 10 extra tablets.

'ASPRO' consists of the purest Acetyl Salicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

**Agents: GOLLIN & Co. Pty. Ltd. ('Aspro' Dept.), Slough, Bucks.**

No proprietary right is claimed in the method of manufacture or the formula.

'Phone: SLOUGH 608



# The ANGLO-FRENCH DRUG CO. Ltd.

Distributing Agents for  
High-Class French Pharmaceutical Preparations

STANNOXYL — Tablets, Liquid Ointment, etc.

ORARGOL — Ampoules, Solution, O.R.L. Outfit.

MYCOLACTINE

IODOBESIN

IODASEPTINE

SEPTICEMINE

*We have recently introduced and are now advertising to the Medical Profession :*

		Retail.	Wholesale.
GYNOCALCION M. & P. Bottles of 80 dragees ..		7/6	68/- per doz.
SARCOPTOL	" 4 oz. ..	8/6	77/- "
"	" 2 oz. ..	4/6	42/- "
SYRUP PERTUSSIS (Gabail) Bottles of 125 cc...		3/-	27/- "
TRINITRINE CAFÉINÉE (Dubois) Tube of 60 pills		5/-	45/- "

Your co-operation in promptly obtaining supplies when required will be appreciated.

238a GRAY'S INN ROAD, LONDON, W.C.1

Telephone: MUSEUM 4029.

Telegrams: AMPSALVAS, LONDON.

Associated Houses: Paris, New York, Montreal, Bombay, Sydney, Wellington, Tokyo.

## ESTABLISHED 1772 HENRY'S CALCINED MAGNESIA

Continues to be prepared with scrupulous care in the greatest chemical purity by  
Messrs. THOMAS & WILLIAM HENRY, 11, East Street, St. Peters, Manchester.  
And is sold in Bottles authenticated by a stamp bearing their name  
New York: Messrs. SCHIEFFELIN & CO, William Street. PRICE 2s 9d  
Paris: Messrs. ROBERTS & CO, 5, Rue de la Paix.

## BESORBON

(Dr. Hill's Formula)

MEDICINAL SNUFF. ABSOLUTELY THE  
FINEST REMEDY FOR CATARRH & GOLD  
IN THE HEAD.

Richard Dickeson & Co.

(Incorporated with Reynolds, Sons & Co., Ltd.)  
57-59 CHARTERHOUSE STREET, LONDON, E.C.1.

## ELEGANCE — EXACTITUDE — EXCELLENCE ENSURED

IN DISPENSING BY CONSISTENTLY USING

HENRY AYSCOUGH THOMPSON'S  
INFUSIONS—DECOCTIONS—SYRUPS  
AND OTHER PREPARATIONS.

IF YOU DO NOT ALREADY USE THE ABOVE YOUR ENQUIRIES WILL BE APPRECIATED.

WILLOWS, FRANCIS BUTLER & THOMPSON, LTD.

89a Shacklewell Lane, London, E.8.

TELEPHONE: CLISSOLD 6361 (four lines).

TELEGRAMS: "FORTY, KINLAND, LONDON."

(2)



# What is ★ MONSOL ★ ?

MONSOL is a highly refined and efficient anti-septic prepared from Mond Oils.

MONSOL is a practical application of four essential principles, never before combined:—

- (a) *Germicidal Power*    (b) *Complete Penetration*  
(c) *Harmless to Tissue*    (d) *Healing Action*

Thus—MONSOL attacks all germs, whether surface or deep seated, without irritation or injury.

MONSOL products all combine these unique properties as no other preparations can do.

# MONSOL

BRAND

GERMICIDE AND DISINFECTANT

MONSOL  
LIQUID for dressings,  
douches, packs, and all  
sick-room purposes

MONSOL OINTMENT  
MONSOL THROAT PASTILLES  
MONSOL DENTAL CREAM

MONSOL CAPSULES  
Keratin-coated  
for intestinal disinfection

Manufacturers : The Mond Staffordshire Refining Co., Ltd., 47 Victoria Street London, S.W.1



**POISONS and PHARMACY ACT.**

Privy Council Order, Jan. 1, 1921.

**DANGEROUS DRUGS ACT, 1920.**

Regulations of May 20, 1921. (Operative Sept. 1, 1921.)

**Dr. J. Collis Browne's  
CHLORODYNE**

is not affected by above Order or Regulations.

It does not require purchaser's signature.

*Proprietors:* J. T. DAVENPORT, Ltd., 83/87 Union Street, S.E.1**The Cream of Creams**

Among popular-priced face creams Snowfire is leading the way. Its name, its reputation for purity, backed by steady advertising, ensure its rapidly growing success. Like all the other Snowfire products, Snowfire Cream is a good, sound line to handle.

Snowfire Tablet.

Snowfire Jelly.

Snowfire Toilet Soap.

Snowfire Face Powder.

Snowfire Shampoo.

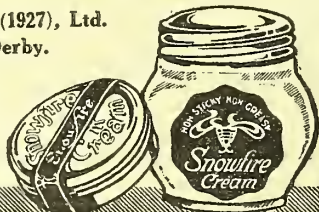
Snowfire Shaving Stick.

**Snowfire  
CREAM***In Opal Jars and Aluminium containers retailing at 1/3 and 3d.*

F. W. Hampshire & Co. (1927), Ltd.  
Sunnydale Works, Derby.

Agents—India:  
Messrs. Siqueira & Son,  
121 Fort St., Fort, Bombay.

Australia:  
Messrs. Salmon & Spraggon  
(Australia) Ltd.,  
218 Kent St., Sydney, N.S.W.

**BOX'S  
Pills**

You've  
heard of  
them before.

You may  
have been  
asked for  
them al-  
ready. You

certainly WILL

be asked for them, because demand is now  
being steadily developed by advertising.  
(Display material supplied free.)

Sizes: 1/3, 3/-, 5/-, 12/-, and 22/-  
(On P.A.T.A.)

Wholesale prices on application.

Prepared only by the Proprietor:

**W. H. BOX,** Giant Pill  
Manufactory, 161 King St.  
**PLYMOUTH.**

Telegrams: "Giant, Plymouth."

Awarded 2 Gold Medals and 2 Diplomas International  
Exhibitions, Paris and Rome, 1914.





To the  
last  
drop



# Hydrogen Peroxide Solution

P. D. & CO.

MUCH irritation and, perhaps, damage may result when you sell an inactive peroxide. Pin your faith and that of your customers to the P., D. & Co. Hydrogen Peroxide Solution which is dependable and will not disappoint. Fairly treated, the P., D. & Co. preparation remains active to the last drop—even in the Tropics. Every batch is subjected to stringent tests before sale, and it is the most stable product that modern science and many years of experience in manufacture can produce.

### Send for Terms

	M.R.P.	M.W.P.
4 oz.	1s. 6d. each	12s. 2d. per doz. net.
8 oz.	2s. 6d. "	20s. 6d. " " "
16 oz.	4s. 6d. "	39s. 3d. " " "

Parke, Davis & Co., Beak St., London, W.1



**Compound Syrup of Hypophosphites**TRADE **"FELLOWS"** MARK

Compound Syrup of Hypophosphites "FELLOWS," in addition to being in constant and increasing demand, adds distinction to a chemist's show window. It is a symbol of progressiveness and reliability

**Tablets Laxative "FELLOWS"***"The Tablet With a Pedigree"*

IN TWO SIZES, NAMELY:

LARGE BOTTLES  
(Containing 100 Tablets)

SMALL BOTTLES  
(Containing 40 Tablets)

**Fellows Medical Manufacturing Co., Inc.**

26 Christopher Street

New York City, N. Y.

LABORATORIES:

Mexico City, Mexico; Montreal, Canada; Paris, France; Milan, Italy;  
Barcelona, Spain; Berlin, Germany.

**Iglodine.****THE SAFE AND PURE ANTISEPTIC,**

And its Kindred Preparations, are Dependable,  
Quick-selling and Profitable to the Chemist.

**THEY SATISFY BUYERS AND BRING REPEAT ORDERS!**

**IGLODINE**, the Ideal Home Healer, is Highly Recommended by the Medical Faculty, and Retailers at 10<sup>d.</sup>, 1/6 and 3/- per Bottle. **IGLODINE** Specialities include—**EMBROCATION, TOILET SOAP, OINTMENT, CREAM, THROAT TABLETS, SUPPOSITORIES, SHAVING STICK, PASTILLES, NASAL DOUCHE, SALICYLATED**: Also **FIRST-AID OUTFITS**.

P.A.T.A. Photo-Litho Showcards. Window Display Scheme.  
Particulars and Prices from

**THE IGLODINE Co., Ltd., NEWCASTLE-ON-TYNE.****ERGOAPIOL (Smith) PROTECTIVE MARK**

Patented in U.S. and Foreign Countries.

Ergoapiol (Smith) is now identified by the letters M.H.S. in the gelatin on the inside of each capsule. These letters are not visible from the outside, but they are plainly discernible in the gelatin when the capsule is cut in half.

**MARTIN H. SMITH CO. NEW YORK, N.Y.***British Agents—***THOS. CHRISTY & CO., 4-12 Old Swan Lane, London, E.C.4****NEPENTHE.****THE SAFEST AND BEST PREPARATION OF OPIUM.**

The word "Nepenthe" is registered under the Trade Marks Act, and is our exclusive property. No substitute may be dispensed when "Nepenthe" is ordered in a prescription. "Nepenthe" comes within the regulations of the Dangerous Drugs Act, 1920.

**FERRIS & COMPANY, LIMITED, BRISTOL.****FREEMAN'S Chlorodyne**

The ORIGINAL and BEST. Extensively used throughout the world since 1844.

Best for the Public—Best for YOU—all-ways.  
**DOES NOT REQUIRE CUSTOMER'S SIGNATURE.**

Cable Address: "Chlorodyne, London."

**'Vitality Pips'**

A wonderfully efficient Tonic. Especially prescribed.

P.A.T.A. Retail Prices 1/3 and 3/-

**YOUR PROFIT 33 1/3% ON COST.**

A Packet on the counter is a real money magnet.



POPULAR



RELIABLE

# Safety First

BRAND

## IODISED THROAT LOZENGES

A Perfect hand-made Lozenge.  
Most attractively packed in tins,  
and well - designed Show  
Outers.

Show matter that compels atten-  
tion and sells the goods.

**The Brand that gives you  
EXTRA PROFIT!**

The Trade's Best Seller.

ORDER YOUR SUPPLIES NOW.



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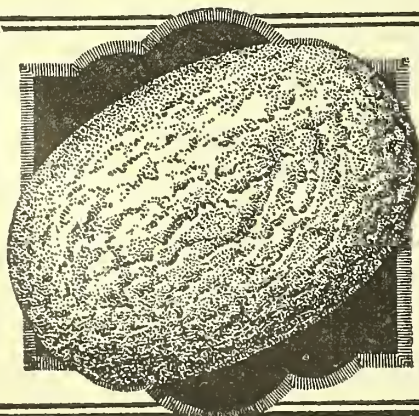
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We suggest, for instance, that the problem of puerperal septicaemia, and even that of

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H. N. GREEN, M. D., Ch. B., M. Sc., and  
E. MELLANBY, M. D., F.R.C.P., F.R.S. in British  
Medical Journal Oct. 20, 1928.


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Season—1928



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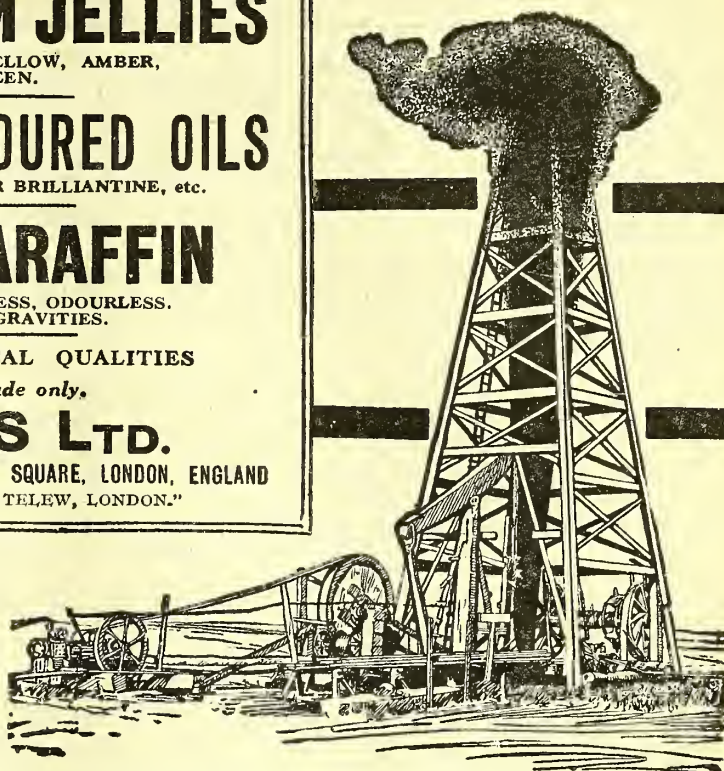
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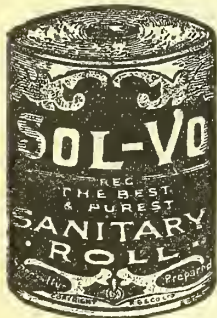
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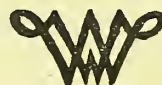
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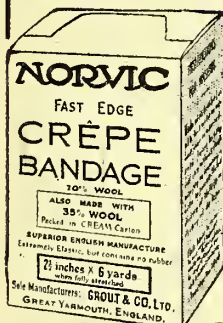
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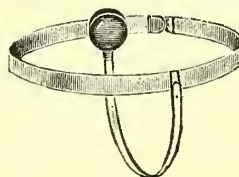
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SUITABLE FOR  
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The SIMPLIC TRUSS is specially designed for Bathing. It gives  
just the correct support for each case.



CAN BE WORN  
AT ALL TIMES  
UNDER ALL  
CONDITIONS.

THE PERFECT  
TRUSS.

ASK YOUR WHOLESALE FOR LATEST TERMS.

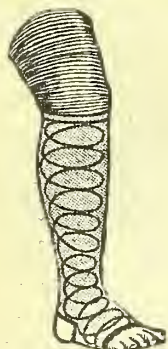
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Makers of Fine Rubber Pro-  
ducts for over Sixty Years.

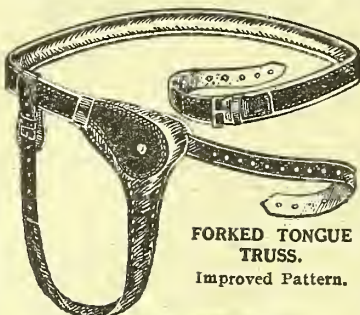
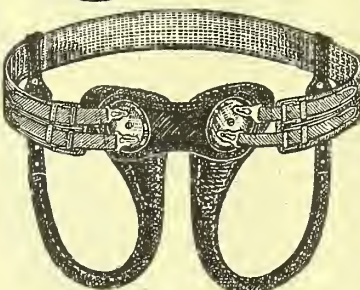


**SURGICAL  
HOSIERY**

Seamed and Seamless.

**CRÈPE  
VELPEAU  
BANDAGES**

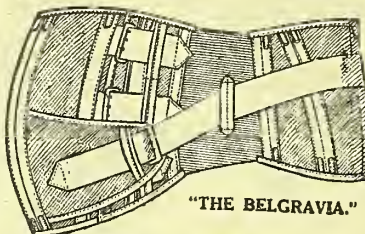
WE ARE SOLE AGENTS.

**TRUSSES** Spring and Elastic.FORKED TONGUE  
TRUSS.  
Improved Pattern.

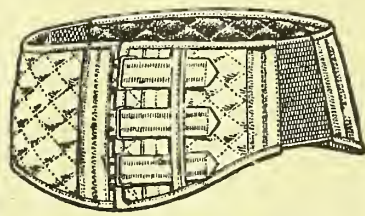
DOUBLE SCROTAL ELASTIC TRUSS.

ANY PATTERN.

ALL QUALITIES.

**ABDOMINAL BELTS  
ABDOMINAL SUPPORTS  
WOVEN ELASTIC CORSETS  
SUSPENSORY BANDAGES**

"THE BELGRAVIA."



"THE LUMBAGO."

MANUFACTURED ON THE PREMISES AT CROWN ROAD WORKS.

**THE R. H. HEWARD CO.,** SURGICAL APPLIANCE  
:: MANUFACTURERS :: **TWICKENHAM.****AYRTON-GRAHAM, Ltd.**

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**FITTINGS**

For the MODERN PHARMACY.

Shop Fronts, Show Cases, Exhibition Cases, Counter  
Cases, Counters, Wall Cases, Glass Signs, etc., etc.

PHARMACIES MODERNISED.

ALL GOODS OF BEST QUALITY  
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Competent Fitters sent to all parts.

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**FORSTERS** & VAPOURISERS  
for  
**FENOLIN** Whooping Cough  
**FLUID**

Hall, Forster & Co., Ltd.  
Newcastle-on-Tyne.

ON P.A.T.A.  
4-oz (1/3) 11/-

**QUININE PESSARIES "SAFEGUARD" BRAND**Guaranteed prepared to the correct formula. Rubber  
Goods in great variety. WRITE FOR CATALOGUE.**BURGE, WARREN & RIDGLEY, LTD.**

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Telegrams—Pessaries, Smith, London.

# Surgical Rubber Goods

VENUS, OWL, GODIVA  
& BALLOON BRANDS.NOTICE.—Several instances of the sale of VENUS BRAND goods  
other than their make having been brought to the notice of Joseph Harris & Co., their Solicitors  
are instructed to take proceedings against anyone (Makers or Vendors) fraudulently using the  
name or design of VENUS or any imitation thereof in connection with Seamless Moulded Goods.SEAMLESS MOULDED SURGICAL GOODS, PESSARIES, HOT WATER  
BOTTLES, URINALS FOR NIGHT OR DAY USE. Wholesale & Export Only.**JOSEPH HARRIS & CO., Rubber Works, Broadheath, Altrincham.**



# CASH PRIZE £20

This is just a reminder that the "Ideenit" Competition closes on March 1st. For the benefit of those who did not see our announcement in last week's issue, we briefly repeat the essential features:—

## WHY

## PRIZE IS OFFERED

## WHAT YOU HAVE TO DO

## POINTS THAT COUNT

## WHAT IDEENIT IS

We wish to recognize fairly the chemist's services in displaying and recommending our new line "Ideenit." Before we can do this we want the chemist's point of view.

Submit a scheme for introducing "Ideenit" through the chemist. The scheme, while recognizing the chemist's help, must be fair to us. Competitors should remember that "Ideenit" will be advertised in the press.

The £20 prize goes to the retailer whose scheme is considered best. Particular importance will be attached to novelty and effective simplicity.

"Ideenit" is an ideal method of applying iodine. Packed with two patent bandages, it will retail at 1/3.

*Entries, marked "Competition," must reach us by March 1st, and be addressed to The Peronia Co., Ltd., Stoney Street, Nottingham.*

# Peronia

# "Surco"

RELIABLE

**ELASTIC HOSIERY  
BODY BELTS  
TRUSSES  
SUNDRIES**

WRITE FOR CATALOGUE

**Surgical Hosiery Co., Ltd.**

RUSSELL STREET  
NOTTINGHAM

**Best sellers**

The public is asking for **ZEAL**

**CLINICAL THERMOMETERS**

because they are:-

**GUARANTEED TO  
STAY ACCURATE  
CONSISTENTLY  
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Made by

# ZEAL

—the name the public knows.

G. H. ZEAL, LTD.,  
75 & 77, St. John St., London, E.C.1.





**BEATSON, CLARK & CO.**

LTD.

Chemical and Medical Glass Manufacturers

**ROTHERHAM, YORKS.**

Telegrams - - - "BEATSON, ROTHERHAM."



**SHOP ROUNDS. OIL ROUNDS.  
POISONS, SYRUPS & ETHERS**

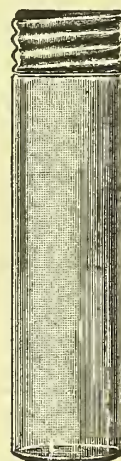
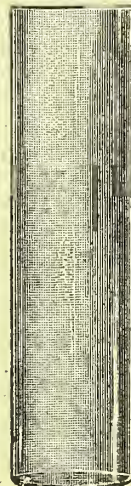
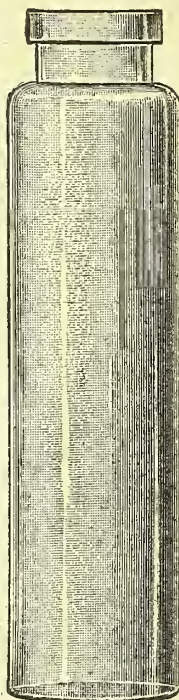
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ESTABLISHED 1751.

DOUBLE VV BRAND

**VIALS**

*British made on British Machines.  
NOT MOULDED.  
Accurately made with Flat Bottoms.*

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**SCIENTIFIC  
MEDICAL &  
SURGICAL**

*Wholesale  
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**GLASSWARE**

Shields, Eye & Nasal  
Douches, Syringes &  
Laboratory Glassware.

**FOREIGN COMPETITION  
FULLY MET.  
INQUIRIES INVITED.**

**H. J. POULTEN, Glassblower**

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'Phone: MARYLAND 3759.

**WAGNER'S DRY BOTTLE CAPS**  
BEST IN QUALITY & APPEARANCE

*Self-Fixing***R.V. WAGNER**

33, Brooke St., London, E.C.1.

Tel. No. Holborn 5090



# The QUALITY CAP for QUALITY PRODUCTS **KORK-N-SEAL**

REGISTERED TRADE MARK



**Why KORK-N-SEAL is the ideal cap for your product.**

1. It is removed by hand. No Corkscrew, opener or tools of any kind necessary.
2. It re-seals perfectly—as often as desired.
3. It keeps your product fresh and pure to the last drop.
4. It is sanitary—protects the pouring edge of the bottle.
5. It prevents leaking under any condition.
6. It makes a neater and more distinctive packing.
7. It cuts capping costs and makes for factory saving.
8. It does away with corking—wiring—waxing and other combinations.
9. It provides an unusually attractive advertising opportunity. Your name or trade-mark may be lithographed in colours on Kork-N-Seal. This gives you an advertisement that will last long after the contents of the bottle is used.
10. The position of the little lever is a "danger signal" that indicates at a glance whether the bottle is sealed or not. No other bottle closure has this feature.

*British made throughout at our own Works, Charlton, S.E.7.*

Patents 1920, 1921, 1928.

**The Logical closure for**

Catsup	Disinfectants
Chili Sauce	Citrate of Magnesia
Salad Dressing	Effervescent Salts
Vinegar	Pharmaceutical
Olive Oil	preparations
Mustard	Proprietary Medicines
Salad Oil	Medicinal Wines
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Extracts	Shellac
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Malts	Dyes
Toilet Articles	Cleaning Fluids
Antiseptics	Ammonia
Serums	Peroxide

And all products used gradually.

## BRITISH KORK-N-SEAL AGENCY LTD.

Manufacturers of Aluminium, and decorated  
Tin closures of every description.

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# Bottles & Glassware

of every description

## Wholesale Only

**E**XTENSIVE & WELL-ORGANISED WORKS enable us to quote competitive prices and give prompt deliveries.

We invite enquiries for bottles of every description—hand or machine made.

Immediate delivery from stock of all kinds of

**DISPENSING  
EMULSION  
EMBROCATION  
FEEDING BOTTLES**

&c., &c.

If well-made bottles of perfect finish interest you, ASK US TO QUOTE.

**BUY BRITISH BOTTLES!**

# Lax & Shaw

(Regd. Office)

**ALBERT  
GLASS  
WORKS**

**LIMITED**

**HUNSLET, LEEDS**

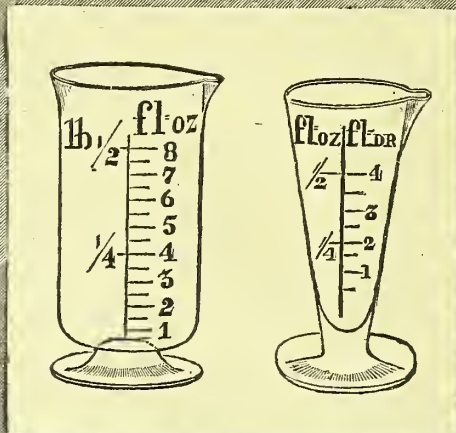
Tel. Address:

"Feeders Phone Leeds."

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# TAYLOR'S



## MEASURES

OVER 50 YEARS REPUTATION  
**F.H. TAYLOR & SONS LTD**  
131 SEVEN SISTERS ROAD, LONDON, N.7  
(WHOLESALE ONLY)

# PETROLEUM JELLY

("SALVO PETROLIA")  
BRAND

THE PERFECTION OF PETROLEUM JELLY  
MANUFACTURED SOLELY BY

## THE DEE OIL CO. LD.

**D 23 & 24 EXCHANGE BUILDINGS  
LIVERPOOL**

TELEPHONE—  
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**"CESTRIAN"**

**LONDON OFFICE**

**11 POULTRY, CHEAPSIDE, E.C.2. PHONE: CITY 8455**

**PACKED IN BARRELS, KEGS OR  
SMALLER PACKAGES IF DESIRED**

OTHER GRADES OF  
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**WHITE OILS, B.P. & Technical Qualities**

SAMPLES & PRICES ON APPLICATION

**OLEUM DEELINÆ (DEE OIL)**  
**THE UNFAILING CURE FOR ECZEMA**





## ROBINSON'S of CHESTERFIELD for CARDBOARD BOXES

ROUND · OVAL · SQUARE · FOLDING

ROBINSON & SONS LTD.  
CHESTERFIELD & LONDON



## "SAMPLING" BOXES

Illustrated above are a few of our "Sampling" Boxes.

These little boxes are very neat indeed and are fitted with self-sealing lid which can be supplied either in the dredger type or plain.

Send for samples and prices.

**ROBINSON & SONS, Ltd.**

Manufacturers of ROUND, OVAL, SQUARE AND FOLDING  
CARDBOARD BOXES,

**CHESTERFIELD**

## RIVISTA ITALIANA DELLE ESSENZE E PROFUMI

*(Affiliated to the Technical Press Association.)*

Official Organ of the Group of Producers of Aromatic  
Substances of the National Fascist Federation of Chemical  
and Allied Industries.

Director : - - - - Dr. EMMA FENAROLI.

Editorial Offices : - VIA S. VINCENZO N.38 MILAN.

Telephone : 31 216-C.P.850.

Producers of Aromatic Substances for Perfumery—Manu-  
facturers of Articles used in the Perfumery Trade—This is  
the Periodical in which to Advertise effectively in Italy.

**MAKE USE OF ITS ADVANTAGES**

SAMPLE COPY AND TARIFF ON REQUEST.



# **"ANYTHING IS GOOD ENOUGH"**

**is not good enough**

Don't be satisfied with common letterpress Slips and Dispensing Labels.  
High Class lithographed labels cost no more if you get them from

**SUTTLEY & SILVERLOCK, LTD.**

**THE Chemists' Printers,**

**92 BLACKFRIARS ROAD, LONDON, S.E.1.**

## **SPECIAL**

Slip Labels, black on white	...	...	...	2/6 per 1,000; 5,000 one kind @ 2/3
„ red on white	...	...	...	6d. per 1,000 extra
Yellow Wove Demy	...	...	...	5 reams @ 6/6, 10 @ 6/-
17 lb. White Glazed Demy	...	...	...	5 reams @ 5/-, 10 @ 4/9
6½d. Toilet Rolls (12 oz. Soluble Sulphite)	...	...	...	@ 46/- per gross
9d. „ (12 oz. first quality, No. 1 thin)	...	...	...	@ 65/- „

**LESS 5% MONTHLY**

*Our labels are printed on Pure Non-curling Gummed Paper. We do not use inferior gummed paper*

*WRITE for SAMPLES.*



**REDUCED  
PRICE**

**C & D**

**PAGE 580.**

If you intend to follow the good advice given there, make enquiries from James Townsend and Sons, Gandy St., Exeter, or 54, Farringdon Street, London, E.C. 4.

**HANDSOME 3.COLOURED ENAMELLED TIN.**

**P.A.T.A.—1/3, 10/- per doz. ; 3/-, 24/- per doz.**

**SOLD EVERYWHERE. Manufactured by**

**LOFTHOUSE & SALTMER Ltd., HULL.**



# PHOSFERINE

## New Window Display Conditions

Monthly Account.

For a small Central Window Display of not less than 14 days and an order for £5 worth of Phosferine we allow a bonus of 10/6, on a £2 10 0 order 5/3.

This shows a net profit on the transaction to the Chemist of 35% besides attracting the passer-by to the window and considerably augmenting sales generally.

Should a £5 or £2 10 0 parcel not be required, any smaller quantity will be forwarded carriage paid, and can, if desired, be regarded as part of the £5 or £2 10 0 order. On completion of the order and a notification that the display is in progress the bonus will be allowed.

The above conditions apply only to the United Kingdom.

Carriage Paid.**EXAMPLE.**

		COST	SELLS FOR
3½ dozen 1/3 size at 12/- net	...	£2 2 0	£2 12 6
2 " 3/- " at 30/- "	...	3 0 0	3 12 0
		5 2 0	
Less 10/6 for Window Show	...	10 6	
		£4 11 6	£6 4 6

Showing a Net Profit of £1 13 0 on an outlay of £4 11 6.

Window Display Material Free and Carriage Paid.

**WHOLESALE PRICES OF PHOSFERINE.**Carriage Paid.Monthly Account.

1/3 size	...	12/- per doz. net.
3/- "	...	30/- " "
5/- "	...	48/6 " "
12/- "	...	114/- " "

**PROTECTED PRICES.**

Phosferine and all of our Proprietary Medicines are supplied on the condition that they are not retailed in the United Kingdom under the following prices—viz., 1/3, 3/-, 5/-, and 12/-.

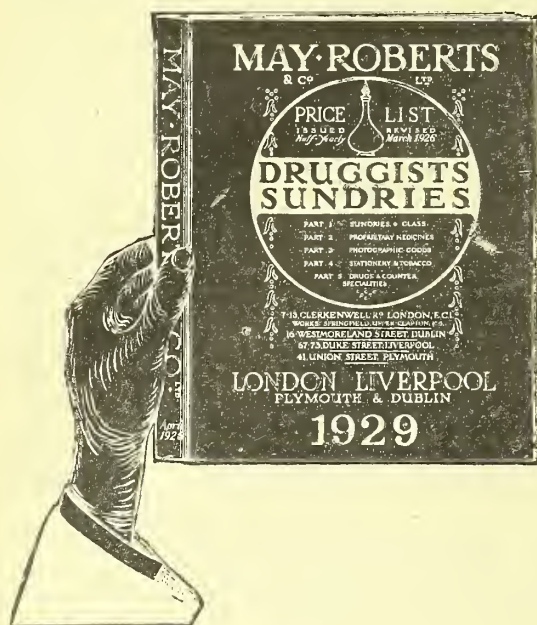
**PHOSFERINE (ASHTON & PARSONS) Ltd., Ludgate Hill, LONDON, E.C.4.**

Telephone No: CITY 8733.

Telegraphic Address: "PHOSFERINE, CENT, LONDON."

IMPORTANT.—Every care is used in corking and packing Phosferine, but occasionally a leaky bottle will pass undetected. Any leaky or faulty bottle should be returned to Ashton & Parsons, Ltd., Ludgate Hill, London, E.C.4, when a fresh supply will be sent and postage refunded.





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The reliance placed by the Trade in May, Roberts' List is the result of half a century's experience.

Success in selling by Catalogue demands confidence on the part of the customer, but the reputation of the May, Roberts' Service for cheapness, promptitude and accuracy is so widespread nowadays that this preliminary act of faith is unnecessary.

A new issue has just been published, and if you wish to possess a complete Guide to the Buying of Proprietaries and Chemists' Sundries it is

## YOURS FOR A POSTCARD.

- Part 1. SUNDRIES AND GLASS.      Part 2. PROPRIETARIES.  
Part 3. PHOTOGRAPHIC GOODS.      Part 4. STATIONERY AND TOBACCO.  
Part 5. DRUGS AND COUNTER SPECIALITIES.

# MAY, ROBERTS & CO., LTD.

(P.O. Box 157),

7-13 Clerkenwell Road, London, E.C.1

And at LIVERPOOL, PLYMOUTH AND DUBLIN



# THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.  
LONDON E.C.4

FEBRUARY 23, 1929.

*This Supplement is inserted in every copy of The Chemist & Druggist.*

## THE CHEMIST AND DRUGGIST SUPPLEMENT

### REVISED ADVERTISEMENT TARIFF.

**Businesses Wanted and for Disposal, Premises to Let, Goods for Sale and Agencies**—6/- for 50 words; every additional 10 words or less, 6d.

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**SITUATIONS WANTED**—2/- for 18 words; every additional 10 words or less, 6d.

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In each case replies may be addressed to a registered number or nom-de-plume, c/o this Office, at a charge of 1/- extra for each advertisement.

### PAYMENT.

All Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

THE CHEMIST AND DRUGGIST, 42 Cannon Street, LONDON, E.C.4.

Telephone: Central 3617 (3 lines).

Telegrams: "Chemicus, Cannon, London" (2 words).

## CLOSING FOR PRESS.

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NOT LATER THAN

ALL ADVERTISEMENTS INTENDED FOR  
INSERTION IN THIS SUPPLEMENT

FIRST POST THURSDAY MORNING.

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Messrs. Orridge & Co., 56 Ludgate Hill, E.C.

Telephone No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuation.

1.—LONDON, S.W. (Main Road).—General Retail Business, with Kodak Agency; present hands many years; returns approach £2,000 at usual prices; scope for considerable development; double-fronted shop; large house; new lease would be granted; valuation terms entertained.

2.—LONDON, W.—General Retail Business, with Kodak Agency and N.H.I.; established many years; returns £1,900 per annum, has done much more; gross profit one-third; double-fronted shop, well fitted and stocked; house sub-let at profit rental; price £1,150.

3.—NORTH LONDON.—General Retail and Dispensing Business; returns £1,600 per annum, at usual prices; good living accommodation; long lease; stock and fixtures estimated at £1,000; price £1,350.

4.—LONDON, W.—General Retail, with Kodak Agency; returns approach £2,500; net profit £700; well-fitted shop, heavily stocked; large house, partly sub-let at £78 per annum; premises must be purchased; further details on application.

5.—LONDON, S.E. (Thickly Populated Area).—General Retail and Prescribing Business; established many years; increasing turnover, January's returns being £124; rent 15s. weekly; lock-up shop, held on lease; price £550; vendors are anxious to sell immediately.

6.—NORWOOD.—Retail and Prescribing Business, with Post Office attached; returns average £1,400 per annum; well-stocked shop; comfortable residence; moderate rent; new lease; price £1,050.

7.—LONDON, S.W.—General Retail and Dispensing Business, with large N.H.I.; established many years; returns approached £1,600; net profit above the average; good house; rent £80; held on lease; price about £1,250, or valuation terms entertained.

8.—WESTERN COAST.—General Retail Business, with Optical connection; returns last year £2,047, with net profit £522; double-fronted shop, well fitted and stocked; living accommodation; rent £95 per annum; a new lease will be granted or the premises may be purchased; price £1,500.

9.—NORTHERN HEALTH RESORT.—Mixed Retail and Dispensing Business, with Kodak Agency; returns exceed £2,100 per annum; net profit approximately £500; double-fronted shop, well fitted and stocked; good house; moderate rent; held on lease; valuation terms entertained.

10.—DEVON.—General Retail and Dispensing Business, with Wine and Spirit Licence; average turnover £4,250 per annum; heavy stock; large house; new lease would be granted or premises may be purchased; no opposition; further details on application.

11.—ESSEX.—Cash Retail Business, with Kodak Agency; returns, under manager, approach £2,000 per annum, with scope for increase in the hands of a principal; good living accommodation; a new lease will be granted; valuation terms entertained.

12.—BRISTOL (Near).—Country Town Retail Business, with Kodak Agency, for disposal; house attached; good lease and low rental; present returns £1,500-£1,600; good scope for increase and for introduction of Optical; price, stock, fixtures and goodwill, £1,200.

13.—SOUTH-EAST COAST.—General Retail and Photographic Business; returns last year £1,700, increasing; gross profit 38 per cent.; ample living accommodation; lease will be granted; stock and fixtures estimated to be worth about £800; price about £1,250.

14.—BERKS (Borders of).—Unopposed Retail and Dispensing Business; returns last year £1,150 and for first six months of this year £650; net profit £360; net rent about £42 per annum; new lease; well-fitted shop; stock estimated to be worth £530; vendor is desirous of selling forthwith and will accept £800 or near offer.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the Value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

## Valuations for Stocktaking

Messrs. O. & Co. are prepared to undertake these essential duties and make Special Terms for such service.

**ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.4**



## The Association of Manfg. Chemists, Ltd.

Business Agency, Transfer & Valuation Department

Head Offices—Kimberley House, Holborn Viaduct, London, E.C.1 (and at 2 Bixteth Street, Liverpool).

PARKIN S. BOOTH, Accountant and Valuer. Phone: City 1261-2-3

### BUSINESSES FOR DISPOSAL

- 1.—STAFFS.—Established Chemist's Business; situated on main road; unopposed in Photo and Optics; returns £24 p.w., scope for increase; lease can be arranged; rent £65 p.a.; price asked, lease and goodwill, £150, fixtures and fittings £150, and stock approx. £450. Full particulars on application. (179)
- 2.—MANCHESTER (District).—Old-established Dispensing Chemist Business in good-class suburb on a yearly tenancy at £120 p.a.; let off £117; returns average £27 per week, all cash; excellent opportunity, as quick sale is desired; good reasons. (172)
- 3.—DURHAM CO.—Chemist Business for immediate disposal; lease can be arranged at £50 p.a. rent; takings £17; Kodak and Ucal Agencies; good living accommodation. (174)
- 4.—STAFFS DISTRICT.—Chemist's Business for Sale; held on lease with 5 years to run at rental of £40 per annum; good living accommodation; good scope; price for goodwill, fixtures, lease, etc., £170; stock at valuation; cause of sale lack of capital. Full particulars on application. (169)
- 5.—HULL.—Dispensing and Family Chemist Business in busy thoroughfare (which will shortly become a main road owing to alterations); rent £26 on a yearly tenancy, which can be secured; returns £900 p.a.; lock-up shop; good prospects for a young qualified man. Further particulars on application. (170)
- 6.—SOMERSET.—Drug and Photographic Business; premises, which consist of lock-up shop with room at rear, held on lease with 8 years to run at rental of £88 p.a. inclusive; good scope for live man; price asked £400. (178)
- 7.—LONDON, S.W.—Very old-established Family Retail and Dispensing Business, occupying prominent corner position in busy thoroughfare; lock-up shop with storage accommodation; held on advantageous lease at £100 per annum; returns approximately £2,500 per annum; can be increased under personal management. Full particulars on application. (148)
- 8.—LONDON, N.—Old-established Retail Dispensing Cash Pharmacy; well-fitted shop and good stock carried; returns average £24 per week, but can be increased with capital; premises include good living accommodation, and freehold can be purchased, or lease obtained; fullest particulars on application; no reasonable offer refused. (182)
- 9.—LONDON, N.W.—Retail Dispensing Business on 13 years' lease at £52 per annum inclusive; returns £1,000 p.a.; excellent opportunity for young qualified man. Further particulars on application. (183)
- 10.—SOUTHEAST-ON-SEA.—For immediate disposal, Chemist's Business, in busy centre; premises consist of lock-up shop, with Dispensing and storage room; rent £200 per annum, progressive; returns average £1,500, could be increased. Fullest particulars on application. (175)
- 11.—WANTED.—Two Chemists' Businesses in or near London; net profits not less than £1,000 per annum. All communications treated with strictest confidence.
- 12.—CARMARTHENSHIRE.—Old-established Chemist's Business situated in good position on main street, with living accommodation; held on lease for 7-14 years; rent £400 p.a.; returns average £35-40; could be increased; stock approx. £8-900. Further particulars on application. (176)
- 13.—LANCS.—Old-established Chemist's Business, with Wine Licence; premises consist of shop and dwelling-house; property for sale, £1,000. Full particulars on application. (177)
- 14.—LONDON, N.—Established Chemist's Business; premises, which include convenient living accommodation, held on lease, 15 years to run; rental £50 p.a.; stock approx. £285; price asked £550, all at. Further particulars on application. (180)
- 15.—LONDON, S.E.—Old-established Dispensing and Family Business; in good position; returns average £20 per week; well-fitted shop; good scope for young and energetic chemist; price, all at £550. Full particulars on application. (184)
- 16.—LONDON, S.E.—Well-situated Drug Stores; premises held on lease, with 17 years to run, at rental of £68 per annum; let off £91; returns average £25 to £30 per week; good opening for N.H.I.; growing district; fullest particulars on application. (185)
- 17.—ESSEX.—Two Chemists' Shops for immediate disposal; premises held on lease at rental of £62 and £52 respectively; returns average £1,189 and £792 per annum; price asked £1,000 all at; full particulars on application. (187)
- 18.—SHEFFIELD (Suburb).—Chemist's Business; recently established; rent 14s. weekly; rates 7s. 6d.; returns approximately £780; could be considerably increased; offers invited. Further particulars on application.

Stocktaking and Valuation of Businesses undertaken at moderate inclusive fee. Chemists are invited to consult us in respect of their requirements in connection with sale or purchase of businesses. Chemists in the North are requested to communicate with our Liverpool Offices.

## ERNEST J. GEORGE

### CHEMISTS' VALUER

*Invites enquiries relative to the following, which have been carefully investigated.*

- 32.—LONDON, E.—Small going concern, doing £850 p.a., with N.H.I.; long lease; scope for energetic man; price £475.
- 33.—LONDON, S.E.—Unopposed position in thickly populated district; lock-up; turnover (average) £1,300 p.a., under management; price £550.
- 34.—LONDON, S.W.—Old-established Retail and Dispensing, with Sub-Post Office, in main road, doing £1,500; N.H.I. and Kodak Agency; living accommodation; price £850.
- 18.—CHESHIRE.—Small Family Business; immediate living for young pharmacist; present turnover £900; can be increased; favourable lease, 20 years to run; rental £32, rising to £38; no living accommodation; stock and fixtures about £700; accept valuation; goodwill to be arranged.
- 31.—LONDON, W.—Good opportunity for energetic man in middle-class Business, doing £1,410 p.a.; gross 40%; long lease; accountant's figures available; price £1,050.
- 30.—LANCASHIRE COAST RESORT.—Good Retail Business doing over £2,000 p.a.; net profit £500 approx.; N.H.I. and Kodak Agency; good house attached; shop and house recently improved; 14 years' lease; rent £52, rising to £78 p.a.; will bear investigation; price £1,650, or near offer.
- 29.—ESSEX COAST.—Owner retiring; established 25 years; Family and Dispensing, with Photo; no opposition; present turnover £1,100; good opportunity for "live" pharmacist; price £700.
- 28.—SUSSEX COAST.—High-class Pharmacy, fully stocked; Library, 200 books; lady assistant; new fittings; 20 years' lease; rent £96; rates £30 p.a.; average £35 p.w. (only opened 9 months); excellent prospects; N.H.I. 500 per month; house attached, electric all through, 5 rooms, bathroom (h. & c.); price £2,500.
- 27.—POPULAR LANCASHIRE WATERING-PLACE.—Good corner Pharmacy; tram route; turnover £2,500; net profit £550; large Photographic trade; excellent scope for general increase for keen man; stock and fixtures at valuation; goodwill to be arranged.
- 25.—LONDON, W.—Excellent opportunity for unqualified man to acquire unopposed Business doing £700 (with Kodak Agency); price £275.
- 23.—LONDON, S.W.—Old-established Family and Dispensing Business, with Photo and Optics, also N.H.I.; well-fitted and stocked Pharmacy; good house, garden, side entrance, etc.; price £1,200 (optical stock and equipment extra, and optional).
- 22.—MIDLANDS.—Excellent opportunity for young qualified man; Drug Store in growing district; population 4,000-5,000; no opposition; well fitted and stocked; good living accommodation and lease; rent 17s. 6d. weekly; present turnover £750; audited accounts; doctors and nursing home near; good prospects for N.H.I.; live Kodak Agency; qualified man could considerably increase; stock and fittings about £500; total ingoing for quick sale, £500.
- 19.—Special offer of Wholesale Druggist's Business in provinces; turnover about £10,000; good net profits; capable of much expansion; inquiries invited.
- 16.—LANCASHIRE COAST.—Turnover, about £1,900; profit £450; stock and fixtures, estimated £1,000; total ingoing £1,500; Kodak Agency; lease can be arranged.
- 15.—NORTH STAFFS.—Family and Dispensing, with Optics and Photography; N.H.I. average 750 scripts per month; turnover, approximately £1,500; profit about £350; price £800; premises can be bought or leased; rent 25s. weekly; living accommodation.
- 11.—LONDON, N.W.—Family and Dispensing, N.H.I., Photo; turnover £1,200; rent £140; sub-lets £105; price £450 (stock and fixtures at valuation).
- 9.—SURREY.—Family and Dispensing, with N.H.I., Photo and Stationery; turnover £1,900; good house, freehold, £800 (on mortgage if desired); price of business £1,150.
- 6.—LONDON, E.—Unopposed position; population 14,000; N.H.I., Kodak Agency, also big Prescribing; capable of considerable increase; turnover £1,517; profit £203; rent £65 per annum; sub-let £52 10s. per annum; price £875.

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- 8.—SHEFFIELD.—Cash Retail, with N.H.I. and Kodak Agency; returns average £900; net profit, £275; good unopposed position; price for quick sale, £525.
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- 10.—RICHMOND (Near).—Family Retail, Photo and Dispensing; no immediate opposition; returns £1,850; net profit £550; good house and large shop; freehold, about £800; mortgage arranged; price £1,150.
- 11.—LONDON, S.W.—Light Cash Retail, with N.H.I.; main road position; returns, under manager, £2,900; net profit £458, clear; good stock; price £1,150; personally recommended.
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We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

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**L**ANCS Seaside Business for Sale; good living accommodation; net profits almost £500 per annum; books audited; will accept £850 for quick sale; only genuine inquiries, please. 167/34, Office of this Paper.**L**EIGH-ON-SEA.—Good-class Cash Retail Pharmacy; lock-up double-fronted shop; corner position; big scope Photographic business; takings average £1,600 yearly; no opposition; well stocked; price, including stock and fittings, £375; good lease at £130 per annum.—Peacock, Rees & Co., "Oriental House," Rectory Grove, Leigh-on-Sea.**L**ONDON, W.—Lock-up Pharmacy; excellent position; main road; takings £43 per week; net profit nearly £11 per week; heavily stocked; owner retiring from pharmacy; all at £1,400. 168/22, Office of this Paper.**L**ONDON, W.—Exceptional opportunity for Pharmacist to acquire good-class Drug Store in centre of high-class residential district (unopposed); present returns nearly £40 per week, steadily increasing, which would be considerably increased by developing Dispensing and N.H.I.; well-fitted, lock-up shop; very low overhead expenses; price £1,100; banker's reference required. 167/29, Office of this Paper.**N.E. COAST** (Yorkshire seaside town).—For immediate disposal, old-established Chemist's Business; Wine Licence; Kodak Agency; well stocked; turnover £2,400. Full particulars to bona-fide prospective buyers. 142/27, Office of this Paper.**NORTH-WEST COAST** (health resort).—Mixed Retail and Dispensing, with N.H.I. and Kodak Agency; returns over £2,000 per annum; net profit over £500 per annum; living accommodation; good reason for selling; price £1,600; no agents. 167/35, Office of this Paper.**NEAR MANCHESTER.**—Old-established Business, with steady N.H.I., full Wine Licence and Photographic trade; can be worked alone by energetic, qualified man; returns last year £1,080 15s., with gross profits £444 16s., which can be increased; offers invited from genuine buyers only. 167/37, Office of this Paper.**S**HEFFIELD DISTRICT (industrial area).—Well-established Retail and Dispensing Business; takings £15 per week; can be increased; 5 years' lease arranged for shop and living accommodation if required; low rental; price for quick sale £550, or valuation terms arranged. Apply Bashforth & Boler, Chartered Accountants, 45 Bank Street, Sheffield.**S**OUTH COAST RESORT.—For Sale, easily run Pharmacy in pleasant neighbourhood; new premises, improving position near post office; Kodak Depot; no N.H.I. or Optics; business eminently suitable for chemist wishing to live semi-retired life; living accommodation over shop; premises are held on 14 years' lease, or freehold may be purchased; owner selling to go abroad. Full particulars from 142/966, Office of this Paper.**S**OUTH-EAST COAST (death vacancy).—Old-established Retail Business; Dispensing, Optical, Photographic; freehold corner shop and living accommodation; centrally situated; main street; turnover approximately £1,500; capable expansion; inclusive price £2,200, or £1,000 and lease granted. P.C.B. 7/1, Office of this Paper.**S**OUTHEAST, ESSEX.—£275 for genuine Light Cash Retail; main road; beautifully fitted and nicely stocked; established 6 years; lock-up, but house portion will shortly be vacant; been neglected, but returns and all other particulars at interview; rent £48, plus rates; proprietor relinquishing through ill-health; practically gift to energetic man; must sell. "Genuine," 168/34, Office of this Paper.**Y**ORKSHIRE.—A neatly-fitted double-fronted Pharmacy, situated on the main road; same hands 26 years; only being disposed of through special reasons; good house; rent £60; turnover last year over £900, under unqualified management; valuation of stock and fixtures, or will accept £700 for quick sale. 166/7, Office of this Paper.**A** FINE opportunity to acquire a sound, genuine and progressive Business in main road of a busy South Coast town; lock-up, double-fronted shop, nicely fitted; returns last year nearly £2,000 at good profits; good-class Retail, Dispensing and Photographic; capable of considerable increase; owner leaving drug trade; price £1,050, or on valuation terms. 167/13, Office of this Paper.



**GENUINE BARGAIN.**—Drug Store for immediate Sale, with remaining stock after fire; takings £12-£15 per week; no opposition nearer than 4 miles; population about 2,000; good reason for disposal; ample scope for N.H.I.; price £70. Apply 166/5, Office of this Paper.

**LIVE Business for Sale in South Wales mining town;** unopposed; population 4,000; present turnover £1,600; well-fitted shop and good house; 18 years' lease; inclusive rental £75; accept £750 for immediate sale; bankers' references. 142/976, Office of this Paper.

**MUST be Sold to Wind up Estate.**—Exeter; busy thoroughfare; double-fronted Freehold Shop and Dwelling-house, where Chemist's business has been carried on for many years; only available through death of proprietor; good opportunity for energetic man; low price; early possession.—Cox & Co., Estate Agents, South Street, Exeter.

**SURGICAL Business, high-class connections, Yorkshire;** well-fitted, double-fronted shop; main road; moderate rent; lease; opening for qualified Chemist; reason for disposing, ill-health. Apply 142/947, Office of this Paper.

## BUSINESSES WANTED.

**CHEMIST requires good-class Business in South-West County;** turnover about £3,000. Please give full particulars (in strict confidence) of returns, gross and net profit, rent, length of lease, staff, accommodation, and price expected; business must be capable of increase. 167/40, Office of this Paper.

**GOOD-CLASS Business in London required;** cash waiting; net profit not less than £800 per annum. Particulars, in strict confidence, to Mr. Ernest Tatton, Solicitor, 144 Kensington High Street, W.8.

**MESSRS. BERDOE & FISH** have a large number of genuine cash buyers seeking sound concerns in all parts up to £4,000, and cordially invite correspondence from intending vendors. Private register kept and quick sales negotiated without publicity. Transfer Offices, 41 Argyle Square, King's Cross, W.C.1. Telephone: Terminus 3574.

**PRIVATE Chemist wishes to purchase for cash Business in or near Liverpool, Lancs or Cheshire side;** turnover £1,500, or more; strictest confidence observed. 165/6, Office of this Paper.

**PRIVATE Chemist wishes to acquire sound, good-class Business;** no Optics; small not objected to if capable of increase. Please give full particulars in strictest confidence of gross and net profits, turnover, rent, length of lease, accommodation and staff, when established. Bankers' and trade references given if required. 166/6, Office of this Paper.

**PRIVATE Chemist requires sound medium-class Business in or near London preferred;** turnover about £1,500; capable of increase. Particulars in confidence gross and net profits, rent, lease, house accommodation; Bankers' reference given if required. 167/5, Office of this Paper.

## PREMISES TO LET.

**BRIXTON ROAD.**—Shops, about 17 ft. by 50 ft., each with upper part of 4 rooms, kitchen and bath; lease 21 years; rent £300 per annum; no premium. Apply Hillier, Parker, May & Rowden, 27, Maddox Street, W.1.

**SHOP premises in busy market place, with three rooms, scullery and basement;** great opportunity for chemist; no opposition; premium £300. 143/975, Office of this Paper.

**SHOPS with Flat over to Let on lease in excellent position at Bromley;** suit Chemist. Apply Baxter, Payne & Lepper, opposite G.P.O., Bromley, Kent.

## PREMISES FOR SALE.

**ISLINGTON.**—Freehold corner premises for Sale; splendid opening for chemists; garage in rear; price £1,075. Apply E. A. Ward, Surveyor, 298 Upper Street, Islington, N.1.

## PARTNERSHIP.

**A QUALIFIED Partner required in a good main road business;** busy shopping centre; must be young, active and have pleasant counter manner; salary and generous share of profits to one able to invest £250; proprietor wants to give more time to optical work. 168/36, Office of this Paper.

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**BATH.**—Junior Assistant (male) required, March 11, for good-class Dispensing and Retail business, with Photography. State full particulars, with salary required, to E. Williams, 25 Wellsway, Bath.

**BEXHILL-ON-SEA.**—Wanted at end of March, capable Junior; must have had good Dispensing experience. Give full particulars, stating age, height, salary required, outdoors, and enclose photo, to Scholefield, Dispensing Chemist, Bexhill-on-Sea.

**BOURNEMOUTH.**—A vacancy occurs for a Junior Assistant (male), with good Counter experience; also for a young lady for Window-dressing and Counter. Apply, stating age, height, and salary required, and enclose photo, to J. K. Matterson, Ltd., Arcade, Bournemouth.

**BRIGG (Lincs).**—Wanted, qualified Manager; must be first-class man; house. Give full particulars, age, experience, etc., to Taylors' Drug Co., Ltd., 16 Boar Lane, Leeds.

**BRIGHTON.**—Wanted, immediately, qualified Assistant; gentlemanly, efficient Counterman and good Dispenser most important; knowledge Photography and Window-dresser; salary £4 15s. to £5. Send photo, full details. Applicants not too far off preferred; interview important. Lane, 100 Western Road, Hove.

**CROYDON DISTRICT.**—Qualified Manager, 30-40; must be good Window-dresser and have thorough knowledge of Photographics. State when disengaged, salary required (outdoors), age, etc. 167/26, Office of this Paper.

**GREAT YARMOUTH.**—Wanted, good Junior Assistant (male); outdoors; no N.H.I. or Sunday work; knowledge of Photography. State age, height, salary and references. 166/2, Office of this Paper.

**KENT.**—Assistant required (not over 30) for market town; previous experience of Agricultural trade essential. Give full particulars, stating age and salary required. 167/202, Office of this Paper.

**LEICESTER.**—Required at once qualified lady or gent. as Superintendent of old-established limited company; one used to N.H.I., Photographic, Counter and Window-dressing. State age, salary required, and when at liberty. Meltonian Drug Co., Melton Road.

**LIVERPOOL DISTRICT.**—Thoroughly trustworthy and competent Assistant, aged about 30, required; permanency for really good all-round man, energetic and willing, with knowledge of Photographics; Lancs or Yorkshire man and abstainer preferred. Give full particulars of experience, age, height, salary required, to 166/20, Office of this Paper.

**LONDON, N.**—Junior Assistant required immediately; must be used to busy Counter trade and N.H.I. Dispensing. State age, salary required, when at liberty, etc., 167/200, Office of this Paper.

**LONDON, E.**—Experienced qualified Manager (about 30) required for Cash Retail and N.H.I. Dispensing business in industrial area; no house; previous experience of this type essential. State age, previous experience, salary required, and when at liberty. 167/2, Office of this Paper.

**LONDON, N.W.**—Qualified Manager required for a brisk Counter business; no house. Give full particulars of experience, and state age, salary required, and when at liberty. 167/205, Office of this Paper.

**LONDON, E.**—Energetic qualified Manager required for busy Cash and N.H.I. business, with house attached; interest on increase of turnover given. Give full particulars, stating age, salary required, and when at liberty. 167/203, Office of this Paper.

**LONDON, S.E.1.**—Two Assistants, age not over 30, one qualified and one junior, for working-class business and N.H.I. Send full particulars or apply personally to Bennett's, Chemists, 79 Union Road, Newington Causeway, S.E.1.

**LONDON, S.E.**—Vacancy for qualified (male) all-round Assistant, not older than 30. Apply, giving fullest particulars, references, salary, age, height, etc., 167/12, Office of this Paper.



**PHOTOGRAPHS, TESTIMONIALS, &c.**

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS. As can be readily understood, when an advertiser receives from 60 to 100 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

**MANCHESTER.**—Pharmacist (male) required as Assistant; permanency; salary to commence £4 10s. State age (not over 50 years), height, experience, etc. 166/16, Office of this Paper.

**SOUTH STAFFORDSHIRE.**—Wanted, an energetic Manager (about 26) for a busy Cash Retail and N.H.I. Dispensing business; no house; in main street of industrial town. Give full particulars, stating age, salary required, and when at liberty. 167/204, Office of this Paper.

**W.2.**—JUNIOR required for March 25th; age 20-25; capable, accurate Dispenser, good writer, and of good address; not afraid of work; good wages to the right applicant; no Panel. Apply, giving full particulars in first instance (no photos) to 142/970, Office of this Paper.

**A**N experienced, qualified Manager required for S.W. London; age about 30; married preferred; applicants must possess keen business ability to increase turnover. Reply in first letter, giving full particulars of experience, salary required, and when disengaged. "Alpha," 167/17, Office of this Paper.

**A**SSISTANT; quick and accurate Dispenser, good Counter-hand; of good appearance and address; must be capable of taking duties single-handed; age 25-30; qualified or unqualified; state salary. Roe, Chemist, Epsom.

**C**HEMIST.—Qualified, to take charge of Branch. Apply at once with references, stating fully particulars of experience and salary. 166/19, Office of this Paper.

**C**OMPETENT qualified Assistant required to manage branch shop. State full particulars. Gill & Son, Chemists, Pendleton, Lancs.

**E**NERGETIC qualified Manager required for a middle-class Cash Retail business in West London; applicants must be thoroughly conversant with modern business methods and be able to increase turnover. Give full particulars in first letter, stating age, salary required, previous experience, and when at liberty. 167/201, Office of this Paper.

**E**XPERIENCED lady Assistant required immediately; staff all women. Apply, giving full particulars as to age, experience and salary required, to J. W. Feltwell, Ltd., Dispensing and Photographic Chemists, 91 Hammersmith Road, W.14.

**E**XPERIENCED lady Assistant required in good-class business, Toilet, Dispensing, Photographic, Counter; Kent. Full particulars, please, to 168/30, Office of this Paper.

**F**ULLY qualified lady or gentleman required; near London; must be young and have had first-class Counter experience; Window-dressing ability an advantage. Reply, giving full details of experience and salary required, to 167/20, Office of this Paper.

**H**ARRODS LTD., require the services of a qualified male Counter Assistant for their Drug Department; to a man of smart appearance, aged about 30, every encouragement will be given. Apply personally before 11 a.m., or write to Staff Controller, Harrods Ltd., 44 Hans Crescent, S.W.

**J**UNIOR Assistant wanted. Apply, stating age, height, experience, salary, and enclose photo, Deacon, Chemist, Glastonbury.

**K**ENDALLS, St. Martin's Pharmacy, Coney Street, York, have a vacancy for a really efficient, live, Counter Assistant (unqualified), used to a busy first-class pharmacy, and knowledge of Photographic sales, expert window-case dresser (either sex), send terms, photograph, etc.

**L**ADY, Junior Assistant; must be smart and obliging at Counter, also accurate Dispenser. Apply, stating age, height, references, salary, and enclose photo, to Dyson, Chemist, 360 Upper Richmond Road, East Sheen, S.W.14.

**O**PPORTUNITY occurs for smart Junior (gentleman) desiring first-class Dispensing experience in high-class pharmacy. Apply Lineley's, Ltd., 308 Earl's Court Road, S.W.5.

**Q**UALIFIED Manager wanted for Industrial district; must be smart man and good Window-dresser. Apply 143/971, Office of this Paper.

**Q**UALIFIED Assistant, middle-class, age about 26, work of general nature; able to take charge sometimes. Photo and all particulars to Hale, Luton.

**Q**UALIFIED Assistant, age 27 to 40, for good-class general business and N.H.I. State age, whether married, experience, salary. Hill-Smith (Warrington), Ltd., 62 Buttermarket Street, Warrington.

**R**EQUIRED, immediately, Junior qualified Assistant (male) for good-class Retail and Dispensing business; must have had good experience and be well recommended. Apply, by letter only, stating age, experience, and salary required, to Gray, 194 Holland Park Avenue, Kensington, W.11.

**R**EQUIRED, by qualified Chemist, a smart lad as Apprentice; every opportunity of learning the business thoroughly and time given for study. 142/975, Office of this Paper.

**T**AYLORS (CASH CHEMISTS) LONDON, LIMITED, require a smart qualified Manager for a Light Retail and Family business, with house attached, in South-West London; an excellent opportunity for a man with progressive ideas. Please give full particulars to Management Department, Taylors (Cash Chemists), London, Limited, Hazelwell Lane, Starchley, Birmingham.

**T**AYLORS (CASH CHEMISTS), LONDON, LIMITED, require a really keen Manager for a good Dispensing and Family business, in a town in Buckinghamshire; good agreement on increase of turnover given. State full particulars, giving age, salary required, etc., to Management Department, Taylors (Cash Chemists), London, Limited, Hazelwell Lane, Starchley, Birmingham.

**U**NQUALIFIED Assistant wanted for March 18th; permanent; age about 30; must have good Counter, Photographic knowledge, and be accurate Dispenser. J. Hughes, 88 Brighton Road, Worthing.

**W**ANTED, qualified Dispenser and Book-keeper by Doctor in Sussex; must be intelligent, quick and accurate Dispenser and neat Book-keeper; salary £2 10s. per week; outdoors. Give recent reference to 163/32, Office of this Paper.

**W**ANTED, lady or gent. Assistant for Counter and Dispensing. Apply, giving full particulars and salary required, together with testimonials, to L. A. Beaumont, Moseley Avenue, Coventry.

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**A** UNIQUE OPPORTUNITY.—Representatives calling on Chemists and Stores wanted to handle the most successful new Toilet Speciality of modern years; it is a proved seller and repeater, and provides immense possibilities to successful salesmen; generous commission. 142/969, Office of this Paper.

**A**SSISTANT required with knowledge of Wet and Dry Chemicals. State age and experience. 138/807, Office of this Paper.

**C**HEMIST to take charge of small Manufacturing Department, Hairdressers' Toilet Preparations and Perfumery; old-established business; must be capable man, with some experience and good references; salary £5 weekly. Watts Bros. (Manchester), Ltd., 72 Cannon Street, Manchester.

**C**COUNTER Hand wanted for Heavy Wets; North London district. Apply by letter, giving full particulars, to 142/945, Office of this Paper.

**D**RUG TRADE.—First-class Representative, with sound knowledge of the Drug trade, required to call upon Retail Chemists; must be of good appearance and address, and thoroughly conversant with the requirements of the Retail Chemist; previous travelling experience essential. Apply, by letter only, stating experience, salary required, etc., to Hough, Hoseason & Co., Ltd., Manchester.



**I**MPORTANT London Sundries House requires a capable, experienced and energetic man for Goods Despatch Department; must be good organiser and disciplinarian, and have sound knowledge of motor and rail routes and best methods of effecting speedy delivery of London and Country orders; excellent prospects for right man. Apply, stating age, experience, references and salary required, to 143/974, Office of this Paper.

**I**NVOICE Clerk, young, efficient, required at once by the British Drug Houses, Ltd., London, N.1. Apply with full particulars to the Secretary.

**I**NVOICE Clerk (male or female) required by leading firm of Wholesale Druggists; quick at figures and good knowledge of the trade essential. State experience and wages expected. P.C.B. 6/37, Office of this Paper.

**J**OHAN RICHARDSON & CO., Leicester, require a competent Pill Maker with experience of all classes of production and coating; a knowledge of the manufacture of Horse Balls, Compressed Tablets, etc., an advantage. Applicants please state age, experience, and wages asked.

**L**IVE Representatives carrying one or two other lines and calling on Chemists, Cutlers and Stores in Cornwall, Devonshire, Somersetshire, Dorsetshire, Wiltshire, Gloucestershire, Monmouthshire, Herefordshire, required by well-known manufacturer selling to the same trade; liberal commission. 142/964, Office of this Paper.

**L**IVE Representatives carrying one or two other lines and calling on Chemists, Cutlers and Stores in Huntingdonshire, Northamptonshire, Bedfordshire, Buckinghamshire, Oxfordshire, Warwickshire, required by well-known manufacturer selling to the same trade; liberal commission. 142/962, Office of this Paper.

**L**IVE Representatives carrying one or two other lines and calling on Chemists, Cutlers and Stores in Lincolnshire, Nottinghamshire, Derbyshire, Leicestershire, Rutlandshire, required by well-known manufacturer selling to the same trade; liberal commission. 142/963, Office of this Paper.

**R**EPRESENTATIVE wanted for old-established company to call on Chemists and Grocers; salary, commission and expenses. State age, experience, married or single, and earnings expected, to 142/965, Office of this Paper.

**R**EPRESENTATIVE, with established connection amongst Chemists in London, north of the Thames, Middlesex, Herts and Essex, is required by a well known and progressive Manufacturing House. Full particulars of experience, age, etc., to 142/967, Office of this Paper.

**R**EPRESENTATIVE, holding other commissions and with good connection Wholesale Buyers in London and South-Eastern Counties, required for sale of Packed Drugs and Foods. Full particulars to Grimwade, Ridley & Co., Wholesale Chemists, Ipswich.

**R**EPRESENTATIVES.—Two or three young energetic men, experienced in selling Toilet Preparations, required by manufacturers of well-established brands; real Salesmen, with good connection amongst Hairdressers, Chemists, etc., who are prepared to prove their worth, will find this a genuine opportunity; large existing connections handed over to right men. Write, stating full particulars of experience, connection, etc., in first letter, to 143/977, Office of this Paper.

**T**INCTURE Maker, experienced, wanted for Provincial Wholesale House. Apply, with details of age, experience, wages required, to 143/972, Office of this Paper.

**T**RAVELLER wanted in Vacuum Flasks calling on the Wholesale in the counties; £5 weekly towards expenses and liberal commission. Address, "L. M. A.," 4 Noble Street, London, E.C.2.

**W**ANTED, Representatives in all counties to carry the well-known Dhaussy Powder Box on commission basis; only men with established connections amongst high-class trade will be considered; the box sells on sight and good prospects for big developments in all territories. Applications, by letter only, giving full details and territory covered, to the Dhaussy Powder Box Co., 11 Bartlett's Buildings, E.C.4.

**W**ANTED for Newcastle and East Coast territories, first-class Representatives for sale, on commission, of well-advertised attractive Proprietary line. P.C.B. 7/11, Office of this Paper.

**W**ELL-KNOWN firm offers excellent opportunity for young man with knowledge of Pharmaceutical Chemistry, etc.; he need not be qualified, and may, at present, be employed in manufacturing or retail pharmacy, but he must be enthusiastic and capable of handling confidential formulas; he will be trained for the special work he will be required to do and may ultimately attain executive position. Full particulars of experience, salary, health, etc., to 166/8, Office of this Paper.

## SITUATIONS WANTED.

### RETAIL. [HOME.]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**A.A.**—JUNIOR Assistant, 21, good Dispenser, 3 years' experience, desires vacancy. FitzGerald, Kilgarraff, Ballylanders, Co. Limerick.

**A** COMPETENT qualified man (25), tall, good address, desires post; experienced all branches, including Optics; West England preferred. 165/38, Office of this Paper.

**A** JUNIOR Assistant (Part I), excellent West-End experience, Counter and Dispensing, requires post, S.W. or West-End London. "M.," 176 West Hill, S.W.15.

**A** PART-TIME situation by Assistant attending Northern Polytechnic; Dispensing, Counter, Display. "A. B.," 34 Stock Street, E.15.

**A** DVERTISER, 40, with 20 years' high-class experience, qualified Optician, desires post as Manager, with view to Partnership. Replies (in confidence) to 166/1, Office of this Paper.

**A** N Assistant, high-class Dispensing and Counter experience, 24, tall, quick, excellent references, has taken sole charge; temporary or permanent. 168/14, Office of this Paper.

**A** S an experienced man; good general experience Stores and West-End; Dispensing, Prescriber, Counter, Salesman.—"G.," 130 Scott-Ellis Gardens, N.W.8.

**A** S Manager, qualified, experienced, energetic; preferably with view to interest in business; Midlands preferred; disengaged. 167/22, Office of this Paper.

**A** SSISTANT or Locum; unqualified; experienced and thoroughly recommended; London or country; free. "A.," 43 Quernmore Road, London, N.4.

**A** SSISTANT, qualified, tall, good address, first-class Dispensing experience, seeks situation, London, with Wednesday and Thursday afternoons free for optical study. J. B. Haynes, "Park View," Parkstone, Dorset.

**A** SSISTANT; unqualified; country preferred; 25 years' town and country all-round experience; good credentials. "Chemicus," 56 Norroy Road, Putney.

**A** SSISTANT, 23, desires post in Potteries or London area; studying Part I; free March 4; 6 years' experience in Potteries and Birmingham. Papineau, 36 Jasper Street, Hanley, Stoke-on-Trent.

**A** SSISTANT; lady; unqualified; 20; good appearance; 4 years' experience Counter, Window-dressing, Book-keeping, etc.; highest references; S. Wales preferred. "L.," 94 Woodlands Road, Barry.

**A** SSISTANT, unqualified, 28, desires permanency or Locum; first-class experience and references. "M. J.," 13 Hangingrold Lane, Hebden Bridge, Yorks.

**A** SSISTANT; unqualified; Counter, N.H.I., Photographics; mid-age; part-time or permanency; London area only. Write "Carmen," 167/160, Office of this Paper.

**A** SSISTANT; unregistered; experienced Counter, Dispensing, Windows, Photographics; manage Drug Stores; disengaged. Write "Torso," 167/16, Office of this Paper.

**B**RANCH MANAGER or Assistant; qualified; tall; 31; at liberty; moderate terms; good references. F. R. Smith, 10 Gray Road, Colchester.

**B**RANCH MANAGER; 17 years as; qualified; company/private; London/Provincial experience; satisfaction throughout—as now; references unquestionable; change unavoidable; disengaged soon as suited; locality optional. "A. E. J.," c/o Littler, Hemel Hempstead.

**C**OMPETENT, qualified Branch Manager; 25; excellent Salesman, accurate Dispenser; good references; available immediately. "Chemist," 26 Camp Road, Leeds.

**C**OMPETENT, reliable, steady man desires permanent or temporary work; unqualified; smart; active; good Dispenser and Counterman; disengaged; highly recommended. "Mr. F.," 286 Kingsland Road, E.3.



**DISENGAGED**, qualified, experienced Pharmacist; Locum or permanent; middle-aged, active; good Dispenser. "M.P.S.", 156 Lower Road, Clapton, E.5.

**DISPENSER**, Book-keeper, Surgical Assistant, Welsh, desires post with Doctor; age 31; 15 years' Surgery experience; excellent references. Humphreys, 180 High Road, Ilford.

**ELDERLY**, qualified, as Manager or Locum; well up in all departments; good references. Davy, "Millfield," Sidley, Sussex.

**EMPLOYMENT** urgently required; qualified; 35; any capacity; anywhere; experienced all branches; married. "W.", 6 Leslie Avenue, Garlinge, Westgate.

**EVENING** work required by Student; 25; capable Dispenser; 8 years' experience. Thompson, 78 Tremadoc Road, Clapham.

**EXPERIENCED** all-round Assistant, tall, unqualified, as Manager, Senior or single. "Statim," 23 Doughty Street, Holborn, W.C.1.

**IN EMERGENCY**—Qualified for Locum by day or longer; 20 years' widest experience; highly recommended; age 36; no extortionate fees.—Write or wire "Chemist," 11 Rosebery Avenue, Gloucester.

**JUNIOR**, 19, completed 4 years' apprenticeship in good-class business, passed Part I, Prizeman Chemistry, Physics, Botany; desires engagement, Manchester or district. F. Berry, 3 Bateson Street, Stockport.

**JUNIOR** Assistant, tall, excellent Dispensing and Counter experience, desires post in high-class business, Bristol-Bath district. Minifie, 18 Moorland Road, Weston-super-Mare.

**J.C.Q.O.**, M.P.S., 25, excellent experience in both branches, requires position as Manager or Senior. 169/6, Office of this Paper.

**LADY** Assistant, unqualified, 23 years, good Counter experience, now disengaged. Bridgman, 4 Serlo Road, Gloucester.

**LADY**, unqualified, 18 years' experience, seeks position with Chemist in or near Reading; knowledge Dispensing; present berth 15 years; disengaged April 2. A. North, 128 Grovelands Road, Reading.

**LADY** Dispenser, qualified (Hall), 14 years' good experience, used to N.H.I. Dispensing, requires post with Chemist or Doctor in London. "L. S.", 156 Elgin Avenue, W.

**LADY** (Hall) desires post Assistant Dispenser, Hospital, Chemist or with Doctor; knowledge Book-keeping. 12 Sutherland Road, Tunbridge Wells.

**LOCUM**; disengaged; qualified; excellent all-round experience and references; entertain permanency. "L.", "Silchester," Ray Park Road, Maidenhead.

**LOCUM**; experienced in all branches; qualified; active; excellent references; terms moderate; disengaged now. "S. C. L.", 54 Priory Road, West Hampstead, N.W.6. Phone: Hampstead 7151.

**LOCUM**; 2-4 weeks; referred Pharmacy; 7 years' experience. "H.", 35 Rundell Crescent, Hendon Central, N.W.4.

**LOCUM**; lady; 14 years' experience; unqualified; Part I; highest references; Manchester district preferred. "E. B.", 188 Embden Street, Manchester.

**MANAGER**, qualified, active and experienced, desires position; at liberty; Locum work considered. Briggs, 8 Brooke Street, Dudley.

**MANAGER**, or view to succession; seaside or London; wide experience, Dispensing, Photo, Optics (qualified); own apparatus; some capital; good address; tall. 169/5, Office of this Paper.

**MANAGER**, fully qualified, desires position in or near London; first-class ability and all-round experience, including Photography; excellent references. 168/15, Office of this Paper.

**MANAGERSHIP** desired by energetic, capable M.P.S.; London or Eastern Counties preferred; thoroughly experienced Dispensing, Photography; Window-dressing; good testimonials. Replies to "S. G.", 25 Chesham Road, Kingston.

**MANAGERSHIP** required in progressive business; accustomed to high-class Dispensing, Surgical, Photo, Optics, etc.; £5 and commission; London or suburbs preferred, "M.P.S.", 168/24, Office of this Paper.

## NAMES AND ADDRESSES.

When sending advertisements for any of the sections in this Supplement, advertisers—as a guarantee of good faith, and not necessarily for publication—should always give their names and addresses. It sometimes occurs that this rule is not followed and delay and disappointment ensues. Strict attention to this detail will be appreciated.

**MANCHESTER OR SUBURB**—Situation wanted as Junior Assistant; 22; disengaged; capable and reliable; good experience, Dispensing, Counter, Prescribing, Photography, etc. H. Copple, 101 Moreton Street, Strangeways, Manchester.

**M.P.S.**; 25; sound London and provincial experience; Managership preferred; not East End. "P.", 72 Jeffreys Road, S.W.4.

**M.P.S.**, 26, requires post in London; excellent references; high-class experience in London and Provinces. Apply P.C.B. 7/3, Office of this Paper.

**M.P.S.**, 32, seeks berth in or near London; tactful, efficient in Dispensing, Window-dressing and Photography; well referred, energetic; brisk Retail preferred. "Energen," 28 Eden Street, Kingston, Surrey.

**M.P.S.**, LADY, desires post; East Kent, or London W. S.W. district preferred; excellent references; disengaged March 9th. 167/8, Office of this Paper.

**PART-TIME** or otherwise; middle-aged Assistant; excellent experience; active and obliging; S.W. or W. district preferred; unqualified. "Reliable," P.C.B. 6/38, Office of this Paper.

**PHARMACIST** (35), tall, married; 17 years' Retail experience (N.H.I., Photographic, etc.); near London; management preferred; excellent references; free early March. Apply 168/19, Office of this Paper.

**POSITION** of trust; 38; unqualified; married; worthy testimonials; Dispensing, Window-dressing, Photography and Salesmanship 20 years' experience; last post as manager well justified; would represent. P.C.B. 6/35, Office of this Paper.

**QUALIFIED** gentleman, 28, desires post as Manager; thorough knowledge in high-class Dispensing, brisk Counter trade and Photographic; disengaged 4 weeks; excellent references. 166/15, Office of this Paper.

**QUALIFIED**, 36, single, Manager or Assistant, desires permanency; all-round experience. Smith, 72 Strahan Road, London, E.3.

**QUALIFIED** Manager, 33, married, desires change; excellent experience in all branches; first-class Window-dresser and Salesman; London preferred. "Chemist," care Richards, 66 Pogett Street, Rochester, Kent.

**QUALIFIED**, 32, single, desires position as Manager or Senior; excellent references; South or West England preferred. 167/10, Office of this Paper.

**QUALIFIED**, 30, desires change; 2½ years at present situation as Manager; North London preferred. 167/7, Office of this Paper.

**QUALIFIED** (1906); high-class experience; competent and reliable; excellent references; good Dispenser. "Z.", 3 High Street, Emsworth, Hants.

**QUALIFIED**, 24, desires responsible and progressive position; ambitious; 8 years' experience, including West-End; at present managing branch shop in London. 168/25, Office of this Paper.

**STOCKTAKING**—Experienced, qualified man is open to take Chemists' stocks; rates, etc., on application. Johnson, 73 Warkworth Street, Lemington, Northumberland.

**THOROUGHLY** competent; elderly; exceptional experience; good Dispenser and Prescriber; would manage Drug Store with option purchase. "Advertiser," 10 Foreign Street, S.E.5.

**UNQUALIFIED**, 24, desires position (London preferred); good all-round experience, Dispensing, Counter, etc.; highest credentials. Roberts, Lonsdale House, Whitehaven.

**UNQUALIFIED** Assistant; 24; first-class references; 9 years' experience; London or suburbs preferred; interview appreciated. "S. V. R.", 34 Coniger Road, Parsons Green, S.W.6.



# ALL PUBLIC PHARMACISTS

should join at once

## THE NATIONAL UNION OF DRUG & CHEMICAL WORKERS

(Incorporating the National Association of Chemists' Assistants)

**BENEFITS:** Trade Protection—Legal Aid—Unemployment

Benefit—Free Use of Employment Bureau

Write for particulars:—ARTHUR J. GILLIAN, Gen. Sec.  
149 Newington Causeway, LONDON, S.E.1

## WHOLESALE.

**ASSISTANT** requires situation; Wholesale House. Offices. Export. Advertising. Buying Departments preferred; 8 years' Retail experience. N. A. B., 46 Stopford Road, E.13.

**ESSENCES.**—Young lady requires situation in works of Essence Manufacturer; 3 years' previous experience; good references. 165/35, Office of this Paper.

**EXPERIENCED**, energetic Salesman, perfect knowledge of Retail, desires outdoor position with progressive firm; present and previous positions with first-class firms of exceptional standing; thoroughly reliable, possessing strong credentials, and soundly recommended. Wm. A. H. Fry, 31 Howara Road, South Yardley, Birmingham.

**EXPERT** on the selling side of any business invites offers; Sales Manager, Sales Organiser, or would accept tempting offer for pioneer sales training of Junior Salesmen on the ground anywhere; Yorkshireman; executive abilities. 167/39, Office of this Paper.

**FOREWOMAN**, with complete knowledge of Perfumery and Soap trade, requires position in firm requiring efficiency. 167/3, Office of this Paper.

**GENTLEMAN**, age 26, Scotsman, 9 years' experience Wholesale and Retail, desires a progressive post in the Wholesale; Representative preferred; home or abroad. 163/5, Office of this Paper.

**GENTLEMAN**, having had Wholesale and Retail experience, known to Doctors and Chemists in a Midland town, desires a Representative's position. 168/50, Office of this Paper.

**RELIABLE** experienced Retail Chemists' Stocktaker, disengaged, seeks permanent or temporary berth; Stocktaking, Sundries, Buyer or Traveller engagements with best Houses only. "H.", 19 Nightingale Road, Clapton, E.5.

**REPRESENTATIVE**, shortly becoming disengaged, is open to represent a Perfumery House of repute for Lancashire and Cheshire; excellent connection among Wholesalers, Chemists, leading Stores, etc. 160/7, Office of this Paper.

**REPRESENTATIVE**, 8 years' experience, Drugs and Druggery, requires change; good live salesman; well known to Chemists, Birmingham and districts. "Rhei", 72 Foxton Road, Alum Rock, Birmingham.

**REPRESENTATIVE**, having a first-class connection with Chemists and Hairdressers in the London and suburban areas, is open to accept an offer; inquiries from principals only will be received in strict confidence. P.C.B. 7/6, Office of this Paper.

**REPRESENTATIVE**, energetic, capable, keen Salesman, 20 years' excellent connection South and West of England, desires re-engagement with good house; Drugs, Sundries or Proprietaries; experienced medical propagandist. 166/11, Office of this Paper.

**YOUNG** lady, experienced in Perfumery, Toilet Goods, Packing, Accounts, requires position London. P.C.B. 7/5, Office of this Paper.

## (COLONIAL, INDIAN AND FOREIGN.)

**BETTER MARKETS ABROAD.**—Export Salesman, 38, 15 years' Continental and overseas experience, good linguist, wants situation as Foreign Traveller for reputable firm; first-class references; good connection amongst Druggists' Sundries Houses. P.C.B. 7/8, Office of this Paper.

**SMART**, tall, 27, unqualified, with 12 years' experience (last 5 years managing) and with undeniable references, desires post abroad as Manager or Assistant; first-class Counterman, accurate Dispenser; wide knowledge of Photography. Further particulars from 165/39, Office of this Paper.

## FOR SALE.

**COMPLETE** set of solid mahogany Pharmacy Fixtures; must be sold by 28th inst. Write in first instance The Tolbooth Chemist, Canongate, Edinburgh.

## CLEAR OUT—your Old or Damaged

Stock of Photo Goods.

Why keep them any longer? Turn them into CASH.

**I GIVE BEST PRICES** for Old Films (damaged, fogged or expired dates); Packet Papers. Cards (any sizes). Old Photo Goods or Cameras. Bromide Papers. Plates (all sizes, all makes). Send any goods in the photo line. I buy all, good or bad. Cash per return. A good price for all Cameras. Send them along.

**S. E. HACKETT, 23 July Road, Liverpool**

**THREE** Single Punch Tablet Compressing Machines, making Tablets up to 3-in.; powerful and as new; capable of years of hard work; will be sold cheaply, together or separately; can be seen by appointment; room wanted. 168/17, Office of this Paper.

**FOR** Sale, 25 cwt. best animal Charcoal; reasonable offer accepted. ROSE, 89 Worship Street, E.C.2.

## MISCELLANEOUS.

**McADAM & TUCKNISS**, Stock and Share Brokers and Dealers, Westminster Bank Chambers, Blackheath, London, S.E.3. Telephone: Lee Green 0081. Telegrams: McAdam, Blackheath, S.E. Bankers: Westminster Bank, Ltd., Blackheath, S.E.3. Shares for sale, free of commission (subject): 52 W. J. Bush Pfs., 75s. 5d.; £295 x 4% Debs., 79s.; 40 Camwal Ord., 2s. 6d.; 10 Prefs., 9s.; 499 Evans Lescher Pfs., 4s. 10d.; 1,000 Hodders, 1s. 7d.; 450 Idms. "A" Ord., 20s. 9d., dividend of 10% paid for many years; 500 Imperial Chemical Defd., 15s. 10d.; 1,000 Low Temperature Carb. (Coalite), 3s. 5d.; 500 L. G. Automatic, 3s. paid, 2s. 9d.; 135 Rimmell Pfs., 8s. 7d.; 900 Spies Pets., 1s. 5d. Wanted (subject): Camwal Ord. & Prefs.; Allenburys; Wright, Layman Pfs., 20s.

**CHEMISTS' FITTINGS.**—Showcases, Wallcases, Drugfittings, Counters, Drawers at low prices. Before you decide send to **GEORGE COOK**, the well-known Chemists' Fitter, 27 Marblesfield Street, City Road, E.C.1.

**LIMITED COMPANIES REGISTERED.**—I have now been engaged in this work over 20 years, so you may rely that my experience in Chemist and other Companies (I take all trades) is hard to beat. Most reasonable and inclusive fee. Advice free. **A. B. SLACK**, 15 Christ Church Avenue, West Didsbury, Manchester.

**SECOND-HAND CHEMISTS' FITTINGS.**—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, **RUDDECK & CO.**, 219 Old Street, London, E.C.1.

**£90.**—10 ft. Drug Fitting, comprising cupboards, drawers, lockers, cornice and shelving; 8 ft. Serving Counter with glass cases in front; 6 ft. Dispensing Screen and Counter; 6 ft. Wall Case, Perfume Case and Desk; Counter Drawers; mahogany; packed and free on rail London. **PHILIP JOSEPHS & SONS, LTD.**, 90 and 92 St. John Street, Clerkenwell, London, E.C.1. "Pharmacy Fitters for Over a Century."

**£95** FOR A COMPLETE SET of Pharmacy Fittings, ready for immediate use, 10 ft. mahogany Drug Fitting with showcase, drawers, cupboards, shelving, etc.; 6 ft. Wall Case in two heights; 6 ft. Dispensing Screen with showcases and bevelled mirror in centre; 10 ft. mahogany Serving Counter with cases in front; two nests of Counter Drawers; plate-glass Counter Case, Perfume Showcase and Desk. Check Till. **PERCY R. E. JOSEPHS**, 69 Old Street, 1/5 Tilney Court, London, E.C.1. "Phone: Clerkenwell 0929."

**£87 15s.**—SET OF MAHOGANY FITTINGS.—10 ft. Drug Run, 30 drawers (glass knobs and labels), shelves, cupboards and lockers; 10 ft. glass-fronted Counter, nest of 13 drawers at back; 6 ft. Wallcase, 6 ft. Dispensing Screen, Perfume Case and Desk. Illustrations on request. **E. BERG, LTD.**, 335 Old Street, London, E.C.1.

## EXCHANGE COLUMN.

### WANTED.

**ENLARGING CAMERA** and other D. & P. Apparatus. Brodribb, 344 Mare Street, Hackney, E.8.

**GOWER**, Chemists' Bookseller, 41 Voltaire Road, Clapham, wants Pharmaceutical Books, including Pharmaceutical Formulas, B.P.C., P.J.T., Optical Books.



# INCREASED SALES for 1929!

## FREE TO USERS OF WRIGHT'S COAL TAR SOAP

The Proprietors of Wright's Coal Tar Soap offer the following prizes, to be awarded in order, to the FIRST 84 CORRECT REPLIES to the Crossword Puzzle, OPENED AFTER THE CLOSING DATE.

### 1st Prize £100

3 Prizes of £50 each    20 Prizes of £5 each

10    "    "    £10    "    50    "    "    £1    "

A  
Supply  
of leaflets  
may be  
obtained  
from your  
Wholesaler  
or direct  
from us.

A Big  
Press  
Campaign  
is now in  
full Swing.  
Get your  
Share  
of this  
publicity

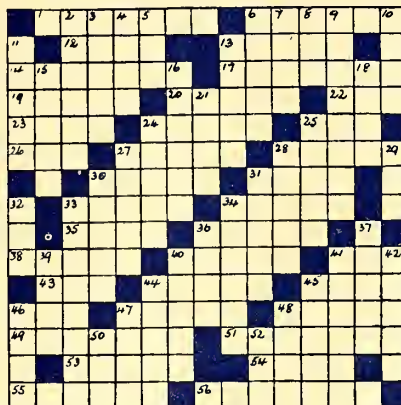
### CLUES

#### Across

1. Landed properties. 6. Obstinate. 12. Encircles head of a saint. 13. Holds the watch at the winning post. 14. When you do this, use Wright's Powder. 17. Comes into view. 19. Rescues. 20. Cords. 22. Obtained. 23. Metric areas. 24. Sometimes clear away husband's shaving tackle. 25. Before. 26. Affirmative. 27. Bet. 28. Alloy. 30. Dickens thief trainer. 31. Give notice. 33. Made of one sort of grain. 34. Wooden Shoe. 35. Confections. 36. C.T. Inhaler will relieve Hay —. 38. Healthier in mind. 40. Desires. 41. Thieves do. 43. Religious Tract Society. 44. Truths. 45. C.T. Ointment provides this for bites and stings. 46. Silent. 47. Presiding spirits. 48. Allows the use of for a time. 49. Precious stone. 51. C.T. Shampoo will — the hair. 53. Feminine name. 54. C.T. Ointment will — the pain of cuts. 55. All inns, such as these, should provide C.T. preparations. 56. C.T. Shaving Soap does so freely and lastingly

#### Down

2. C.T. Shaving Soap provides the best. 3. Subdues. 4. Mountains. 5. Likewise. 6. One generally does after washing. 7. Little demons. 8. Shelter. 9. Aromatic like C.T. Shampoo Powder. 10. Mis-laid. 11. Attempt. 13. Small portable light. 15. Fleet quadrupeds. 16. Source. 18. Female deer. 21. Cooking done here. 24. Reward for work. 25. Mistake. 27. Necessary for washing. 28. Little folk who should be kept very clean. 29. Bashful. 30. Wash them with C.T. Soap to preserve complexion. 31. Found in water and in some hair.



32. Donkey. 33. Put C.T. on cuts and scratches. 34. Don't let cuts become this; use Wright's Coal Tar Ointment. 36. Meeting points of rays. 37. There are many in this puzzle. 39. Kind of lily. 40. Keep all Wright's Coal Tar Preparations, thus, convenient. 41. Competitor in a race. 42. Surround. 44. Cuts down. 45. Stop. 46. Net-work. 47. Bitter as —. 48. Wife of Jacob. 50. Portuguese money. 52. Permit.

In submitting this solution I agree to all the conditions enumerated above.

NAME AND ADDRESS SHOULD  
BE WRITTEN HERE IN  
PLAIN BLOCK LETTERS

Be sure to mark your envelope "No. 4 Crossword."

Street 18.

# WRIGHT, LAYMAN & UMNEY, Ltd.

SOUTHWARK, LONDON, S.E.1



Your  
customers  
are asking  
for  
DUBARRY'S  
Silkashave

-the **NEW** shaving  
sensation



Retail 1s. 3d. Refill 10d.

"Silkashave" is a high quality shaving soap presented in an attractive and dignified form at a popular price.

Its cooling and antiseptic properties refresh and soothe the skin, leaving it as soft as velvet.

The advertising of "Silkashave" in the London "Daily Mail" and "Evening Standard," together with other forms of sales-promoting publicity, has created a widespread demand for this most excellent product of the Dubarry Laboratories.

Chemists wishing to participate in this trade should communicate now with









